Roland®

CD-2

CF/CD RECORDER

Owner's Manual

■ **Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (Page 4–5; Page 6–8). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, Owner's Manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.**

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USING THE UNIT SAFELY

INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

About ⚠WARNING and ⚠CAUTION Notices

⚠WARNING	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
⚠CAUTION	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

About the Symbols

⚠	The △ symbol alerts the user to important instructions or warnings.The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
	The ⃠ symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
	The ● symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

ALWAYS OBSERVE THE FOLLOWING

⚠WARNING

- Before using this unit, make sure to read the instructions below, and the Owner's Manual.

- Do not open (or modify in any way) the unit or its AC adaptor.

- Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). Refer all servicing to your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.

- Never use or store the unit in places that are:
  - Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
  - Damp (e.g., baths, washrooms, on wet floors); or are
  - Humid; or are
  - Exposed to rain; or are
  - Dusty; or are
  - Subject to high levels of vibration.

- Make sure you always have the unit placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces.

⚠WARNING

- Be sure to use only the AC adaptor supplied with the unit. Also, make sure the line voltage at the installation matches the input voltage specified on the AC adaptor's body. Other AC adaptors may use a different polarity, or be designed for a different voltage, so their use could result in damage, malfunction, or electric shock.

- Use only the attached power-supply cord. Also, the supplied power cord must not be used with any other device.

- Do not excessively twist or bend the power cord, nor place heavy objects on it. Doing so can damage the cord, producing severed elements and short circuits. Damaged cords are fire and shock hazards!

- This unit, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level, or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should immediately stop using the unit, and consult an audiologist.

- Do not allow any objects (e.g., flammable material, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the unit.

⚠ WARNING

- Immediately turn the power off, remove the AC adaptor from the outlet, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page when:
  - The AC adaptor, the power-supply cord, or the plug has been damaged; or
  - If smoke or unusual odor occurs
  - Objects have fallen into, or liquid has been spilled onto the unit; or
  - The unit has been exposed to rain (or otherwise has become wet); or
  - The unit does not appear to operate normally or exhibits a marked change in performance.

- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit.

- Protect the unit from strong impact.
  (Do not drop it!)

- Do not force the unit's power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through.

- Before using the unit in a foreign country, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.

⚠ CAUTION

- The unit and the AC adaptor should be located so their location or position does not interfere with their proper ventilation.

- Always grasp only the plug on the AC adaptor cord when plugging into, or unplugging from, an outlet or this unit.

- At regular intervals, you should unplug the AC adaptor and clean it by using a dry cloth to wipe all dust and other accumulations away from its prongs. Also, disconnect the power plug from the power outlet whenever the unit is to remain unused for an extended period of time. Any accumulation of dust between the power plug and the power outlet can result in poor insulation and lead to fire.

- Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children.

- Never climb on top of, nor place heavy objects on the unit.

- Never handle the AC adaptor or its plugs with wet hands when plugging into, or unplugging from, an outlet or this unit.

- Before moving the unit, disconnect the AC adaptor and all cords coming from external devices.

- Whenever you suspect the possibility of lightning in your area, disconnect the AC adaptor from the outlet.

- Should you remove screws, keep them in a safe place out of children's reach, so there is no chance of them being swallowed accidentally.

- Always turn the phantom power off when connecting any device other than condenser mic that require phantom power. You risk causing damage if you mistakenly supply phantom power to dynamic mics, audio playback devices, or other devices that don't require such power. Be sure to check the specifications of any mic you intend to use by referring to the manual that came with it.

  (This instrument's phantom power: 48 V DC, 10mA Max)

IMPORTANT NOTES

In addition to the items listed under "USING THE UNIT SAFELY" on Page 4–5, please read and observe the following:

Power Supply

- Do not connect this unit to same electrical outlet that is being used by an electrical appliance that is controlled by an inverter (such as a refrigerator, washing machine, microwave oven, or air conditioner), or that contains a motor. Depending on the way in which the electrical appliance is used, power supply noise may cause this unit to malfunction or may produce audible noise. If it is not practical to use a separate electrical outlet, connect a power supply noise filter between this unit and the electrical outlet.
- The AC adaptor will begin to generate heat after long hours of consecutive use. This is normal, and is not a cause for concern.
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.

Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- Noise may be produced if wireless communications devices, such as cell phones, are operated in the vicinity of this unit. Such noise could occur when receiving or initiating a call, or while conversing. Should you experience such problems, you should relocate such wireless devices so they are at a greater distance from this unit, or switch them off.
- Observe the following when using the unit's CD-R/RW drive. For further details, refer to "Handling the CD-R/RW Drive" on Page 7.
  - Install the unit on a solid, level surface.
  - Do not move the unit or subject it to vibration while the drive is operating.
- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Excessive heat can deform or discolor the unit.
- When moved from one location to another where the temperature and/or humidity is very different, water droplets (condensation) may form inside the unit. Damage or malfunction may result if you attempt to use the unit in this condition. Therefore, before using the unit, you must allow it to stand for several hours, until the condensation has completely evaporated.
- If you place the unit on a piano or an item of furniture, the rubber feet of this unit may discolor or damage the finish of the piano. To prevent the rubber feet from causing this type of problem, place a cloth under the unit.

Maintenance

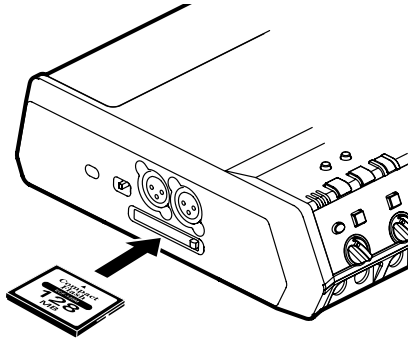
- For everyday cleaning wipe the unit with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a cloth impregnated with a mild, non-abrasive detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- Never use benzine, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Additional Precautions

- Unfortunately, it may be impossible to restore the contents of data that was stored on a CompactFlash or CD-R/RW disc once it has been lost. Roland Corporation assumes no liability concerning such loss of data.
- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- Never strike or apply strong pressure to the display.
- When connecting / disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).
- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.
- Use a cable from Roland to make the connection. If using some other make of connection cable, please note the following precautions.
  - Some connection cables contain resistors. Do not use cables that incorporate resistors for connecting to this unit. The use of such cables can cause the sound level to be extremely low, or impossible to hear. For information on cable specifications, contact the manufacturer of the cable.

Handling CompactFlash Cards

- Carefully insert the CompactFlash card all the way in—until it is firmly in place.



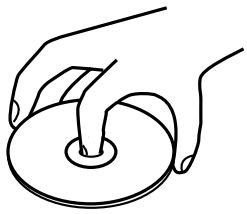
- Never touch the terminals of the CompactFlash card. Also, avoid getting the terminals dirty.
- This unit's memory card slot accepts the CompactFlash card. Microdrive storage media are not compatible.
- CompactFlash cards are constructed using precision components; handle the cards carefully, paying particular note to the following.
  - To prevent damage to the cards from static electricity, be sure to discharge any static electricity from your own body before handling the cards.
  - Do not touch or allow metal to come into contact with the contact portion of the cards.
  - Do not bend, drop, or subject cards to strong shock or vibration.
  - Do not keep cards in direct sunlight, in closed vehicles, or other such locations (storage temperature: -25 to 85° C).
  - Do not allow cards to become wet.
  - Do not disassemble or modify the cards.

Handling the CD-R/RW Drive

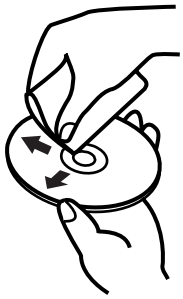
- Install the unit on a solid, level surface in an area free from vibration.
- Never use the emergency eject hole to open the disc tray while the this unit is operating.
- Remove any disc from the drive before powering up or down.
- When you carry this unit, remove the disc from the loading tray.
- To avoid the risk of malfunction and/or damage, insert only discs with CD-R/RW into the CD-R/RW drive. Never insert any other type of disc. Avoid getting paper clips, coins, or any other foreign objects inside the drive.

Handling CD-R/RW Discs

- DO NOT play a CD-R/RW disc (CD-R/RW disc on which track data from a CompactFlash card has been backed up ⇨ Page 71) on a conventional audio CD player. The resulting sound may be of a level that could cause permanent hearing loss. Damage to speakers or other system components may result.
- Don't use unusually shaped discs, such as heart-shaped or octagonal discs. Doing so may damage the CD-2.
- Do not bend the disc.
- Do not drop or stack discs.
- Do not place heavy objects on a disc, or subject it to strong physical shock.
- Hold a disc by inserting a finger in the center hole and pressing your thumb against the outer edge. Be careful not to get fingerprints on, or scratch the recording surface of the disc (the green surface).



- Do not use in dusty areas.
- Do not leave the disc in direct sunlight or an enclosed vehicle.
- Do not keep the disc in the CD-R/RW drive for a long time.
- To protect the disc, keep it in its original case.
- Do not put a sticker on the label of the disc.
- When writing a title on the label surface of the disc, use a soft-tipped writing implement such as a felt pen.
- Wipe the disc with a soft and dry cloth radially from inside to outside. Do not wipe along circumference.



- Keep your discs clean using a commercially available CD cleaner. Do not use benzine, record cleaner spray or solvents of any kind.
- Please read the documentation that is included with your CD-R/RW discs.

Copyright

- Unauthorized recording, distribution, sale, lending, public performance, broadcasting, or the like, in whole or in part, of a work (musical composition, video, broadcast, public performance, or the like) whose copyright is held by a third party is prohibited by law.
- This unit is designed for professional use. When using the CD-R/RW drive to transfer audio signals, this unit can perform recording without being subject to the restrictions of the Serial Copy Management System (SCMS). This is because the unit is intended solely for musical production, and is designed not to be subject to restrictions as long as it is used to record works (such as your own compositions) that do not infringe on the copyrights of others. (SCMS is a feature that prohibits second-generation and later copying through a digital connection. It is built into MD recorders and other consumer digital-audio equipment as a copyright-protection feature.)
- Do not use this unit for purposes that could infringe on a copyright held by a third party. We assume no responsibility whatsoever with regard to any infringements of third-party copyrights arising through your use of this unit.

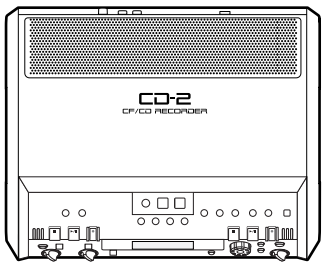
About the License Agreement

- The CD-2's CD-writing functionality, and its copying functionality are designed to allow you to reproduce material to which you have copyright, or material which the copyright owner has granted you permission to copy. Accordingly, reproduction of Music CD or other copyrighted material without permission of the copyright owner avoiding technical prohibiting features of second-generation and later copying like SCMS or others constitutes copyright infringement and may incur penalties even in case such reproduction is for your own personal use and enjoyment (private use). Consult a copyright specialist or special publications for more detailed information on obtaining such permission from copyright holders.

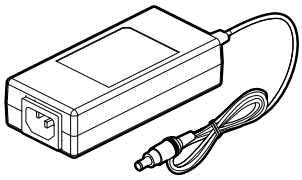
Check the Included Items

Check the CD-2 package to make sure it includes these items.

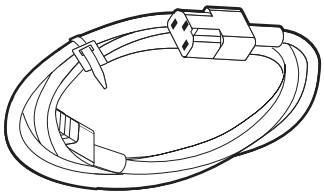
❑ **CD-2**



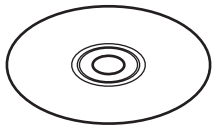
❑ **AC Adaptor (PSB-3U)**



❑ **Power Cord**



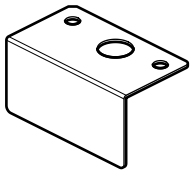
❑ **Blank CD-R disc : 700MB**



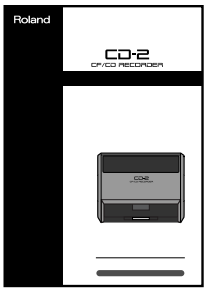
❑ **CompactFlash (CF card): 128MB**

* The card is already formatted. ⇨ Page 36

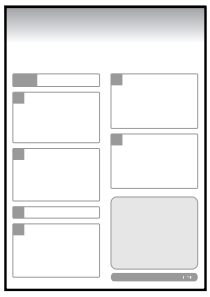
❑ **Card Protector (attached to the bottom of the CD-2)**



❑ **Owner's Manual**

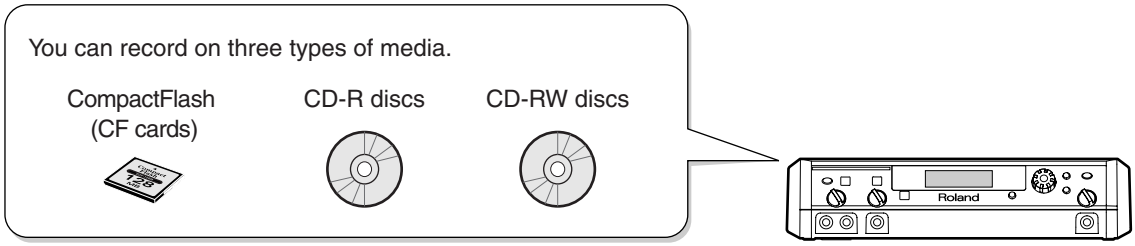


❑ **Leaflet ("Record Your Performance and Create a CD")**



Main Features

Easily create an original music CD using only the CD-2



- **You can create a music CD from selected songs recorded on a CompactFlash card.**
- **You can create a music CD by directly recording onto a CD-R/RW disc.**

Easily record using the internal mics, and listen back using the built-in speakers

- **Since stereo mics are built in, you can start recording immediately.** Page 30
  For hands-free operation, there's an "Auto Level Control" function which automatically adjusts the input levels of the internal mics (Page 76).
- **Since stereo speakers are built in, you can listen to your recordings right away.**

Connect mics or instruments to directly record a vocal or instrumental performance

- **You can directly record a performance from mics or instruments (e.g., guitar or digital piano) connected to the input jacks.** Page 31
  The CD-2 provides external mic jacks, a guitar input jack to which a guitar or bass can be connected directly, and line input jacks.

Use mix-recording for even greater possibilities

- **You can layer your own vocal or instrumental performance with a song from a music CD.** Page 32
  While listening to the accompaniment provided by a karaoke CD, you can add your own vocal or instrumental performance and record the result to a CompactFlash card.
- **Songs you've recorded on a CompactFlash card can be layered with additional performances.** Page 34
  You can build up multi-part instrumental or vocal performances by yourself. For example, while listening to a piano accompaniment you've previously recorded, you could mix in an additional vocal performance.

Convenient practice functions for music lessons

- **You can slow down the playback speed without affecting the pitch of a song.*** Page 40
- **You can change the playback pitch (key) of a song.*** Page 41, 42
- **You can remove the vocal from the playback of a CD.*** Page 42
  The CD-2 provides a Center Cancel function that can eliminate much of the main vocal part from a CD so it becomes less noticeable. This lets you use your favorite CDs as karaoke CDs.
- **You can repeatedly play back a desired section.** Page 43, 45
  The A-B Repeat function lets you play back a specified section repeatedly.

  * These functions are available only for CD.

Easy editing with CompactFlash

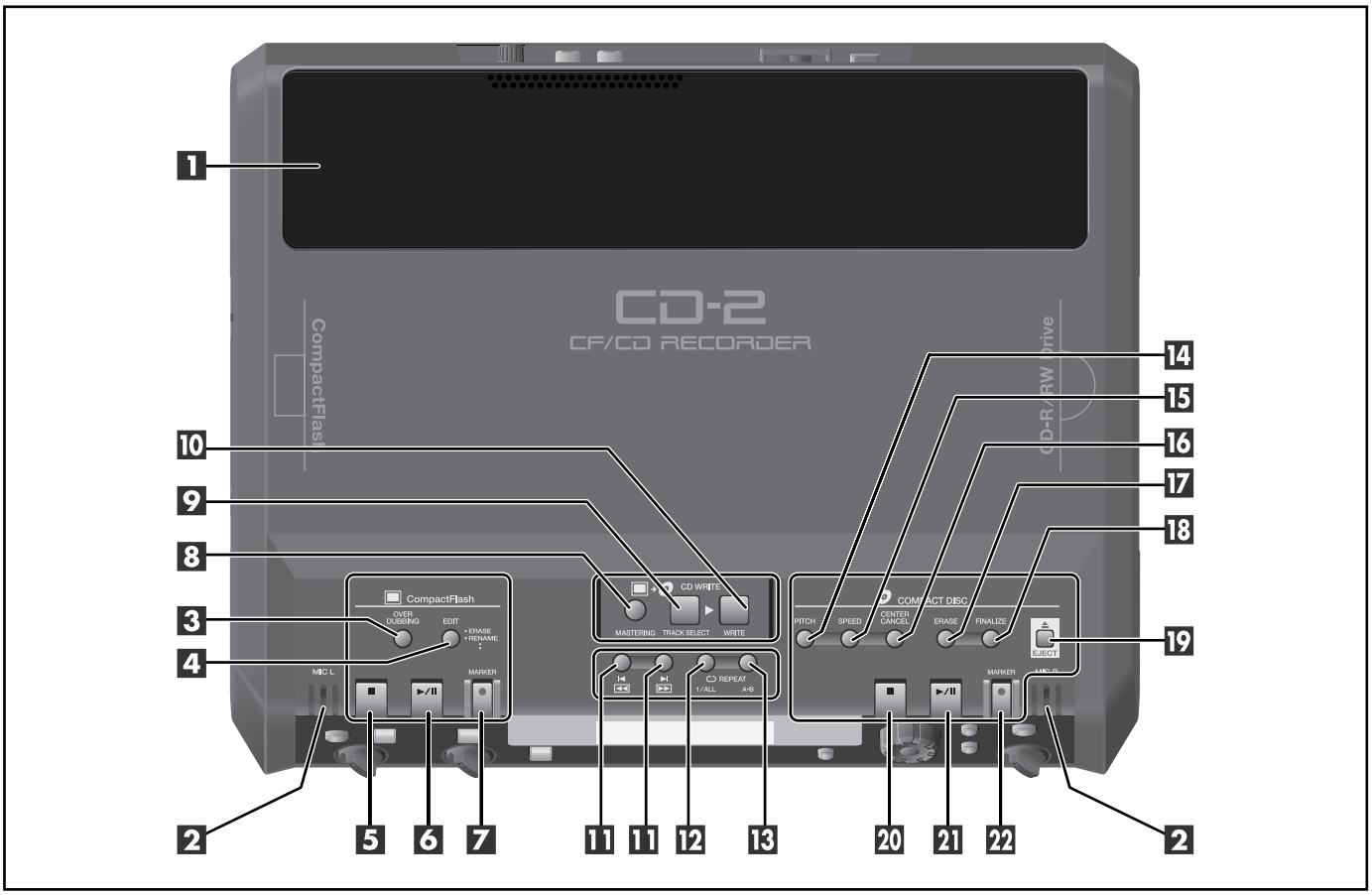
- **You can delete unwanted regions of silence that were recorded before or after the song, or divide a song as desired.** Page 60, 62

Versatile built-in effects

- **You can process your vocal or instrumental performances by applying a variety of effects.** Page 70
  The CD-2 provides a wide range of effects for a variety of applications, such as for vocals or for guitar/bass.
- **You can make a professional-sounding CD.** Page 49
  The CD-2 provides mastering effects that can add a professional-sounding final touch to your music CD.

Panel Descriptions

Top Panel



Internal Speakers/Internal Mics

1 Stereo Speakers

These are a pair of stereo speakers built into the CD-2.

2 MIC L/MIC R

These are a stereo pair of mics built into the CD-2. You can use these mics to record.

Page 30, "Recording with the Internal Mics"

CompactFlash Operation Area

Use the controls in this area for operations on a CompactFlash (CF card).

3 OVERDUBBING Button

Use this button when you want to play back a track (song) from a music CD or CF card while overdubbing (layering) an additional a vocal or instrumental performance.

Page 32, "Layering Your Performance with a Song from a Music CD"

Page 34, "Layering Your Performance with a Song from a CF Card"

4 EDIT Button

Use this button when you want to edit the tracks of a CF card.

Page 58–63, "Editing a CF Card"

5 Stop (■) Button

Press this button to stop playback or recording.

Page 44, "Playing Back a CF Card"

6 Play/Pause (►/II) Button

Press this button to start playback or recording.

During playback or recording, you can press this button to pause. Press it once again to resume playback or recording from the location at which you paused.

If you pause recording, the next track will be started at the point you resume recording.

Page 44, "Playing Back a CF Card"

7 Record (●)/MARKER Button

- Press this button to enter recording-standby mode for a CF card.
- During recording, you can press this button to assign a track number.

Page 55, "Using [MARKER] to assign track numbers"

CD WRITE Area

The controls in this area let you create a music CD from CF card tracks.

8 MASTERING Button

This button lets you apply mastering effects to tracks on the CF card.

⇨ Page 49, "Creating a Professional-Sounding CD"

9 TRACK SELECT Button

This button lets you select the CF card tracks that you want to write to a CD-R/RW.

⇨ Page 46, "Creating a Music CD from a CF Card"

10 WRITE Button

This button writes the selected CF card tracks to a CD-R/RW disc.

⇨ Page 46, "Creating a Music CD from a CF Card"

CF Card/CD Common Area

The controls in this area let you control the media (CF card or CD) that you've selected as the source.

11 Previous track/Next track (⏮/⏭) Buttons Rewind/Fast-forward (⏪/⏩] Buttons

- You can use these buttons to jump to the beginning of the preceding or the following track. During playback, the [Previous track(⏮)] button takes you back to the beginning of the currently playing track.
- While stopped, press and hold these buttons to rapidly move to the beginning of the track.
- During playback, press and hold one of these buttons to rewind or fast-forward.
- While paused, press and hold these buttons to rapidly rewind or fast-forward.

⇨ Page 40, "Playing Back a CD"

12 REPEAT: 1/ALL Button

- This button repeatedly plays one track or all tracks.

⇨ CF card: Page 44, CD: Page 43, "Repeatedly Playing Tracks"

- When assigning a title a CF card track, this button enters a space between characters of the title.

⇨ Page 59, "Assigning a Title to a Track"

13 REPEAT: A-B Button

- This button repeatedly plays back the region you specify.

⇨ CF card: Page 43, CD: Page 45, "Repeatedly Playing a Section"

- When assigning a title a CF card track, this button deletes a character from the title.

⇨ Page 59, "Assigning a Title to a Track"

COMPACT DISC Operation Area

The controls in this area let you control the CD-R/RW disc or music CD.

14 PITCH Button

- You can use this button to adjust the pitch (fine adjustments of less than a semitone) of the CD playback.

⇨ Page 41, "Making Fine Adjustments to the Playback Pitch"

- You can use this button to transpose the key (adjustments of a semitone) of the CD playback.

⇨ Page 42, "Changing the Key of the Playback"

15 SPEED Button

This button plays the CD slowly without affecting its pitch.

⇨ Page 40, "Playing Back at a Slower Speed"

16 CENTER CANCEL Button

This button lets you eliminate (or reduce) the main vocal or lead guitar sound from a CD.

⇨ Page 42, "Removing the Vocal or Lead Guitar from the Playback"

17 ERASE Button

This button lets you erase previously recorded tracks from a CD-RW disc, or to "un-finalize" a disc.

⇨ Page 64, "Erasing Tracks from a CD-RW Disc"

18 FINALIZE Button

This button finalizes a CD-R/RW disc that you've finished recording.

⇨ Page 50, "Make a Disc Playable in a Conventional CD Player"

19 EJECT (⏏) Button

This button opens or closes the disc tray.

⇨ Page 26, "Inserting/Removing a CD"

20 Stop (■) Button

This button stops playback from or recording.

⇨ Page 40, "Playing Back a CD"

21 Play/Pause (▶/II) Button

This button starts playback or recording.

During playback or recording, you can press this button to pause. Press it once again to resume playback or recording from the location at which you paused.

If you pause recording, the next track will be started at the point you resumed recording.

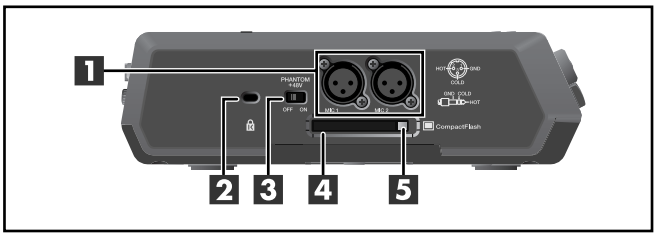
⇨ Page 40, "Playing Back a CD"

22 Record (●)/MARKER Button

- Press this button to enter recording-standby mode for the CD-R/RW disc.
- During recording, you can press this button to assign a track number.

⇨ Page 55, "Using [MARKER] to assign track numbers"

Side Panel (CompactFlash Slot)



1 MIC 1/MIC 2 Jacks

Mics with XLR-type plugs can be connected to these jacks.

Page 20, "Connecting Other Equipment"

2 Security Slot ( )

You can attach a commercially available security lock here.

http://www.kensington.com/

3 PHANTOM Power Supply Switch

This switch supplies phantom power to the XLR-type MIC 1/MIC 2 jack.

Page 22, "Connecting Condenser Mics"

4 CompactFlash (CF Card) Slot

You can insert a CompactFlash (CF) card here.

Page 27, "Inserting/Removing a CF Card"

If desired, you can attach the included card protector to prevent theft of the CF card.

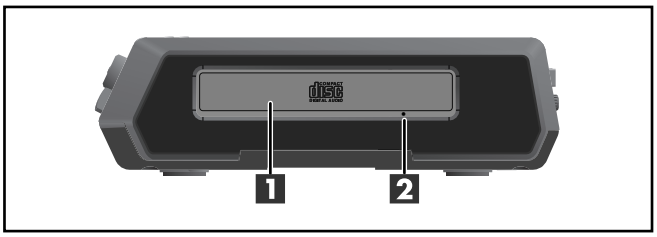
Page 19, "Attaching the Card Protector"

5 Card Eject Button

Use this button to eject the CF card.

Page 27, "Removing a CF Card"

CD-R/RW Drive



1 Disc Tray

Place the CD in this tray.

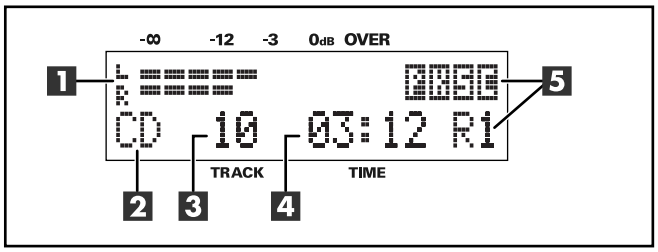
Page 26, "Inserting a Disc"

2 Emergency Eject Hole

You can use this to remove the disc in case of emergency. Normally, it is not used.

Page 26, "If the Disc Tray Doesn't Open"

Display



The display shows various information or messages related to the operation you're performing, such as when making various settings or editing tracks.

1 LEVEL Meter

This indicates the volume level of the track that's playing or the instrument or mic that's being input.

2 Source Name Indication

This indicates the name of the currently selected audio source.

3 TRACK Indication

This indicates the track number.

4 TIME Indication

- This indicates the elapsed playback or recording time. You can switch the time information that is shown here.

Page 75, "Displaying the Remaining Time"

- The track titles of a CF card will be scrolled here.

Page 78, "Viewing the Track Titles on a CF Card"

5 Icon Indications

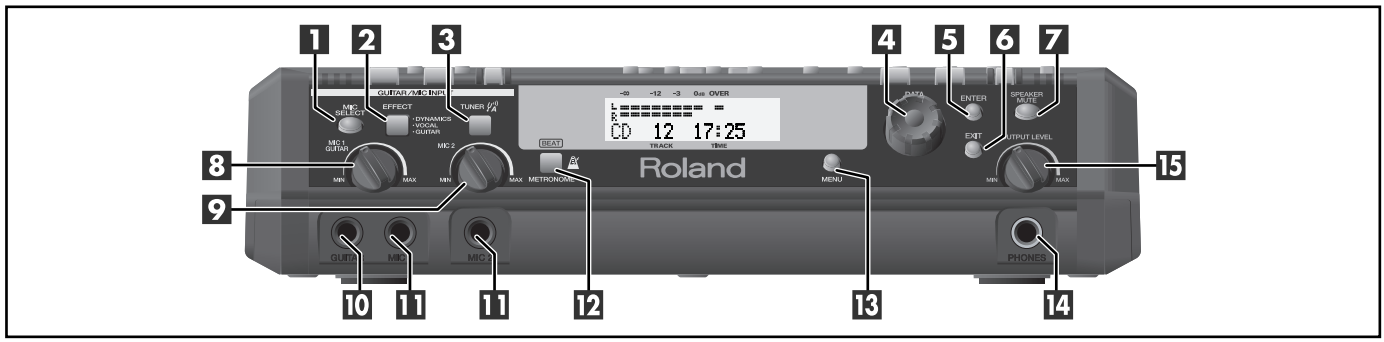
- Functions specific to a CD

	Displayed when the playback pitch is being altered. Page 41
	Displayed when the key is being altered. Page 42
	Displayed when the playback speed is being altered. Page 40
	Displayed when the Center Cancel function is on. Page 42

- Functions common to both CD and CF

R1	Displayed during 1-track repeat playback. CD Page 43, CF card Page 44
RA	Displayed during all-track repeat playback. CD Page 43, CF card Page 44
AB	Displayed during A-B repeat playback. CD Page 43, CF card Page 45

Front Panel



1 MIC SELECT Button

This selects the audio input source that will be recorded.

⇨ Page 37, "Selecting the Recording Source"

2 EFFECT Button

This button applies an effect to the audio input source.

⇨ Page 70, "Applying Effects to Your Vocal or Instrumental Performance"

3 TUNER Button

- Press this button to enter Tuner mode.

⇨ Page 66, "Tuning Your Instrument"

- You can use this button to sound a reference pitch.

⇨ Page 67, "Listening to a Guide Tone While Tuning"

4 DATA Dial

- Use the dial to adjust the value of the setting shown in the display.
- When assigning titles to CF card tracks, use the dial to choose characters.

⇨ Page 59, "Assigning a Title to a Track"

5 ENTER Button

Press this to answer "yes" to messages shown in the display.

6 EXIT Button

Press this to answer "no" to messages shown in the display.

Also, this button is pressed to return to a previous screen after you've modified a setting.

7 SPEAKER MUTE Button

This button temporarily silences the internal speakers.

⇨ Page 25, "Temporarily Muting the Sound"

8 MIC 1/GUITAR Knob

This adjusts the input level of the MIC 1 jack or the GUITAR jack.

⇨ Page 37, "Adjusting the Input Level"

9 MIC 2 Knob

This adjusts the input level of the MIC 2 jack.

⇨ Page 38, "Adjusting the Input Level"

10 GUITAR Jack

You can connect an electric guitar or bass to this jack. Since this is a high-impedance jack, you can connect a guitar or bass directly.

⇨ Page 20, "Connecting Other Equipment"

11 MIC 1/MIC 2 Jacks

Mics with phone plugs can be connected to these jacks.

⇨ Page 20, "Connecting Other Equipment"

12 METRONOME Button

- This button sounds the metronome.

⇨ Page 52, "Using the Metronome"

- You can use this button to specify a count-in.

⇨ Page 53, "Sounding a Count-In to Ensure Accurate Timing"

13 MENU Button

Use this button to access various functions and settings, such as those for adjusting the display contrast or selecting the recording mode.

⇨ Page 90, "Menu List"

14 PHONES Jack

You can connect a set of headphones to this jack.

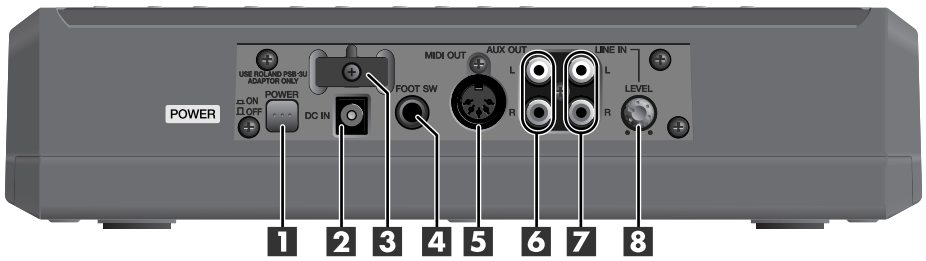
⇨ Page 20, "Connecting Other Equipment"

15 OUTPUT LEVEL Knob

This knob adjusts the volume of the internal speakers and the headphones.

⇨ Page 25, "Adjusting the Volume"

Rear Panel



1 POWER Switch

This turns the power on/off.

Page 24, "Turning the Power On/Off"

2 AC Adaptor Jack

Connect the included AC adaptor to this jack.

Page 20, "Connecting Other Equipment"

3 Cord Hook

Wrap the AC power adaptor cord around this hook to prevent the cord from being accidentally unplugged.

Page 21, "Caution when making connections: AC Adaptor Jack"

4 FOOT SW (Foot Switch) Jack

You can connect a foot switch (such as the Roland DP-2 or BOSS FS-5U; separately available) to this jack. Use it to play back, record, or assign track numbers.

Page 20, "Connecting Other Equipment"
Page 76, "Specifying the Function of the Foot Switch"

5 MIDI OUT Connector

This connector transmits MIDI messages.

- If you want to play back SMF (Standard MIDI File) data, connect this jack to the MIDI IN connector of your external sound generating device.

Page 73, "Playing SMF (Standard MIDI File) Data"

6 AUX OUT Jacks

Use these jacks to output analog audio signals to an external speaker system or electronic piano.

Page 20, "Connecting Other Equipment"

You can choose the type of audio signal that is sent from the AUX OUT jacks.

Page 77, "Choosing the Audio Source that is Output from the AUX OUT Jacks"

7 LINE IN Jacks

You can connect your electronic piano or keyboard to these jacks, and record your performance.

Page 20, "Connecting Other Equipment"

8 LEVEL Knob

This knob adjusts the input level of the LINE IN jacks.

Page 38, "Adjusting the Input Level"

Media That Can Be Used with the CD-2

As its recording media, the CD-2 uses CompactFlash cards (CF cards) and CD-R/RW discs. The functions available for editing or deleting songs (tracks) after recording will differ according to the media you use.

The table below shows the functions that can be used with each type of media.

CD-2 function		Media			
		CF card	CD-R disc 4x speed supported	CD-RW disc 4x/8x speeds supported	Music CD
			Logo (use a disc bearing one of the logos below)		
			COMPACT disc Recordable / COMPACT disc DIGITAL AUDIO Recordable	COMPACT disc ReWritable / COMPACT disc DIGITAL AUDIO ReWritable	COMPACT disc DIGITAL AUDIO
Recording	Conventional recording	OK	OK	OK	
	Overdubbing	OK			
	Record mode selection	OK			
Playback	Conventional playback	OK	OK	OK	OK
	Repeat playback	OK	OK	OK	OK
	Special playback (Slow/Pitch/Key/Center Cancel)		OK	OK	OK
	SMF (Standard MIDI File) playback		OK	OK	
Edit tracks		OK			
Delete tracks		OK		OK	
Cancel finalization				OK	
Create an original music CD			OK	OK	
Back up a CF card			OK	OK	
Copy an original music CD			OK	OK	

- We cannot guarantee that a music CD created on the CD-2 will play on all CD players. Depending on your CD player's support for CD-R/RW discs, music CDs you create may not play correctly.
- Even if a disc bears an appropriate logo, recording or playback may not be possible depending on the state of the disc.
- For details on how to handle CF cards and CD-R/RW discs, refer to the instructions that came with the media you're using.
- We cannot guarantee that special discs not conforming to the music CD specification (e.g., "copy-control CDs" or "copy-guard CDs") will play. When using the CD-2 to play a music CD, please carefully read any statements printed on the CD package.

MEMO

- **About CD-R discs**

  Use CD-R discs that support 8x speed.

  Example: 2-48x speed, 1-32x speed

- **About CD-RW discs**

  Use CD-RW discs that support 4x speed or 8x speed.
  (CD-RW discs that support ultra-speed or ultra-speed plus cannot be used.)

  Example: multi-speed CD-RW discs: 1-4x speed, 4x speed

  High-speed CD-RW discs: 4-10x speed, 4-12x speed

Notes Regarding CompactFlash (CF) Cards

In this manual, CompactFlash cards are referred to as "**CF cards**."

You can purchase CF cards at your local computer dealer or at a store that handles digital cameras.

■ Specifications

● Supported capacities:

16 MB, 32 MB, 64 MB, 128 MB, 256 MB, 512 MB, 1 GB, 2 GB

● CF Type II card is not compatible.

■ Recommended CF Cards

SanDisk, Kingston

- Even if recommended CF cards are used, there may be cases in which they will not operate correctly.

■ Formatting a CF Card

A newly purchased CF card or one previously used in a computer or digital camera may need to be formatted before it can be used with the CD-2.

⇨ Page 36, "Preparing a CF card for use"

■ Regarding the CF Card Protector

You can attach the included card protector in front of the CF card slot. This will block the CF card slot, preventing the CF card from being stolen.

⇨ Page 19, "Attaching the Card Protector"

■ Recording Modes and Maximum Recording Times

When using a CF card for recording, you can select one of three recording modes as appropriate for the desired recording time and audio quality (⇨ Page 36).

The following table shows the maximum recording times possible with each recording mode on various capacities of media.

Capacity	Maximum recording time (approx.)		
	Recording mode		
	Standard	Long	WAV
16 MB	3 minutes	6 minutes	1.5 minutes
32 MB	6 minutes	12 minutes	3 minutes
64 MB	12 minutes	24 minutes	6 minutes
128 MB	24 minutes	49 minutes	12 minutes
256 MB	49 minutes	98 minutes	24 minutes
512 MB	98 minutes	196 minutes	49 minutes
1 GB	196 minutes	392 minutes	98 minutes
2 GB	392 minutes	784 minutes	196 minutes

- The maximum times given above are approximate. The actual time may be slightly less depending on how tracks have been edited.
- You can view the remaining time in the display.

  ⇨ Page 75, "Displaying the Remaining Time"
- Tracks using differing recording modes may be recorded on a single CF card.

Notes Regarding CD-R/RW Discs

■ Recommended Manufacturers: CD-R Discs

Taiyo Yuden Corp., Mitsubishi Chemical Corp., Ricoh Corp., Hitachi Maxell Corp.

■ Recommended Manufacturers: CD-RW Discs

Mitsubishi Chemical Corp., Ricoh Corp., Hitachi Maxell Corp.

- Even if recommended CD-R/RW discs are used, there may be cases in which they will not operate correctly.
- CD-RW discs that support ultra-speed or ultra-speed plus cannot be used.

■ Maximum Recording Times

Capacity	Maximum recording time
650 MB	approximately 74 minutes
700 MB	approximately 80 minutes

- The maximum times given above are approximate. The actual time may be slightly less depending on the number of tracks that are recorded.
- You can view the remaining time in the display.

  ⇨ Page 75, "Displaying the Remaining Time"

Attaching the Card Protector

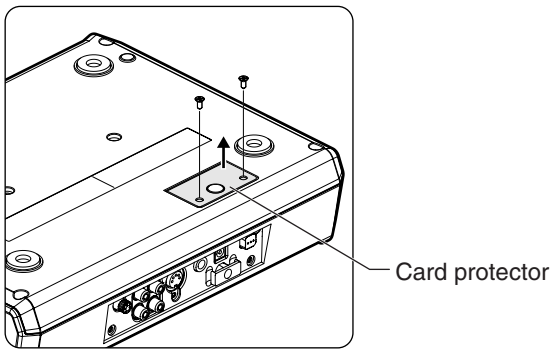
You can attach the included card protector in front of the CF card slot to block the slot and prevent theft of the CF card.

To attach the card protector, proceed as follows.

1 Turn off the CD-2 and all connected equipment.

- Disconnect all cables from the CD-2.

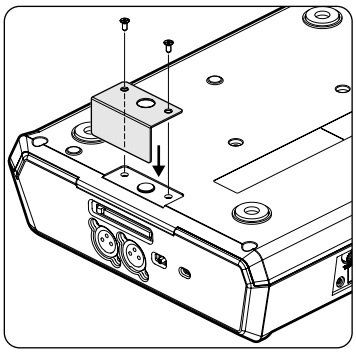
2 Turn the CD-2 upside down, and remove the card protector.



① Use a Philips (+) screwdriver to remove the two screws shown in the illustration.

② Pull out the card protector in the direction indicated by the arrow.

3 Position the card protector as shown in the illustration, and fasten it in place using the two screws you removed in Step 2 - ① .



4 Turn the CD-2 right side up.

⚠ NOTE

When turning the CD-2 upside down, place stacks of newspapers or magazines to support the four corners (or two sides) so that stress is not placed on the buttons or knobs, possibly damaging them. Then, carefully position the CD-2 in such a way that its buttons and knobs won't get damaged.

Handle the CD-2 with care, and avoid dropping it.

MEMO

If you're not using the card protector

To prevent the card protector from being lost, leave it fastened in its original location (shown in the illustration for Step 2).

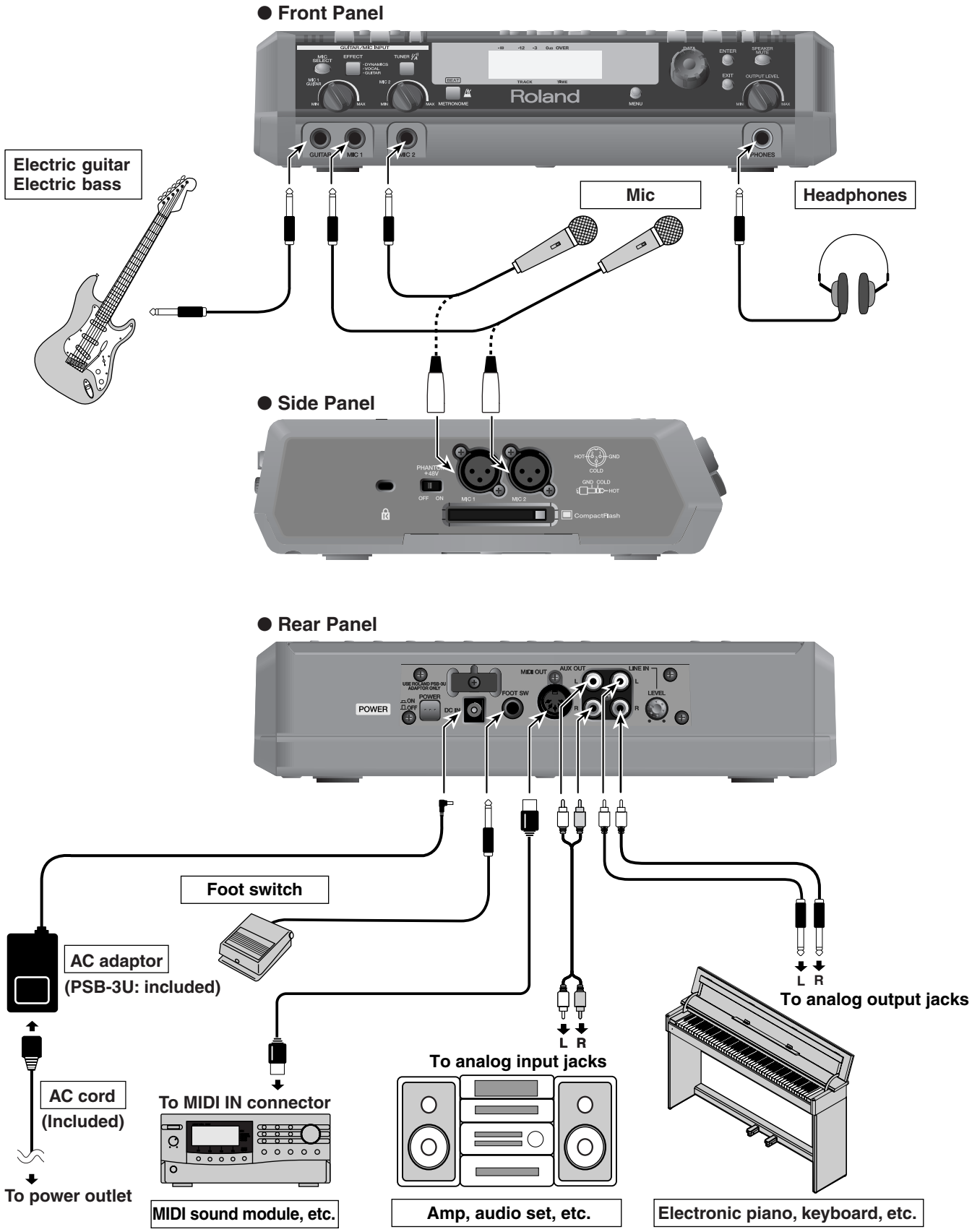
MEMO

Don't overtighten the screws, since this may strip the threads and even damage the CD-2.

Connecting Other Equipment

⚠ NOTE

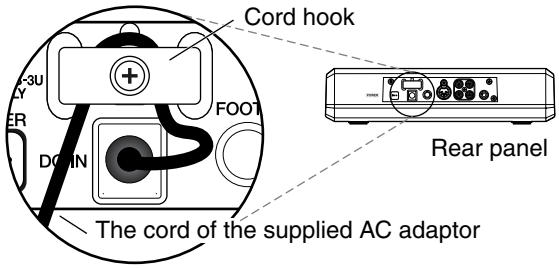
- To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.



Cautions When Making Connections

AC Adaptor Jack

- To prevent the inadvertent disruption of power to your unit (should the plug be pulled out accidentally), and to avoid applying undue stress to the AC adaptor jack, anchor the power cord using the cord hook, as shown in the illustration.

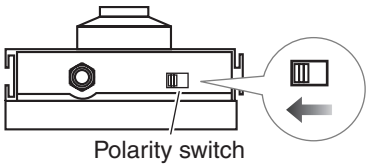


Connection Cables

- When connection cables with resistors are used, the volume level of equipment connected to the inputs (MIC 1, MIC 2, GUITAR, LINE IN) may be low. If this happens, use connection cables that do not contain resistors, such as those from the Roland PCS-series.

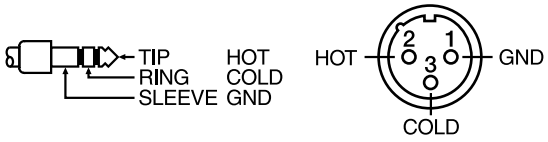
Foot Switch

- If you are using a Boss FS-5U, set the polarity switch of the FS-5Uas shown in the illustration.



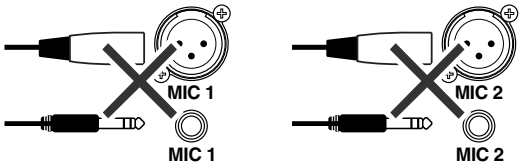
MIC 1/MIC 2 Jacks

- This instrument is equipped with balanced (XLR/TRS) type jacks. Wiring diagrams for these jacks are shown below. Make connections after first checking the wiring diagrams of other equipment you intend to connect.

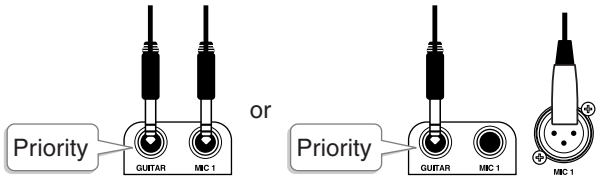


- Howling could be produced depending on the location of mics relative to speakers. This can be remedied by:
  1. Changing the orientation of the mic(s).
  2. Relocating mic(s) at a greater distance from speakers.
  3. Lowering volume levels.

- You must not connect a mic to both MIC jacks (XLR-type and phone-type) of the same number. Doing so will damage the mic and/or the CD-2.



- If cables are plugged into both the MIC 1 (XLR-type or phone-type) and the GUITAR jack, the input from MIC 1 jack will be cancelled.



Connecting Condenser Mics

If you're using condenser mics, you must make settings so that phantom power is supplied to them.

⚠ NOTE

- Supplying phantom power to a dynamic mic or an audio playback device will cause malfunctions. Also, the CD-2 cannot be used with devices other than condenser mics that require phantom power (such as the BOSS Direct Box DI-1).

  Carefully read the owner's manual for the mic you're using, and **be sure to set the phantom power switch to "OFF" unless you are using a condenser mic that requires phantom power.**

1 Connecting a mic to the XLR type MIC 1 (or MIC 2) jack

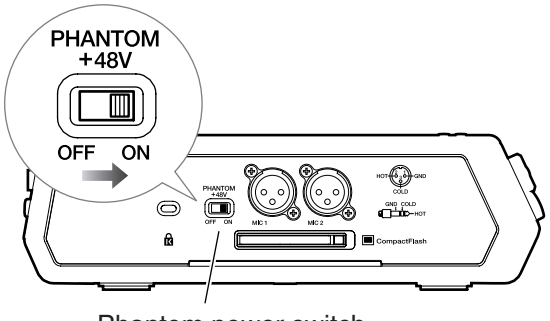
🕮 MEMO

- Phantom power is not supplied to the phone type MIC 1 jack and MIC 2 jack located on the front panel. If your mic requires phantom power, you must connect the mic to the XLR type MIC 1 jack (or MIC 2 jack) located on the side panel.

2 Turn on the power of the CD-2.

⇨ Page 24, "Turning the Power On"

3 Slide the phantom power switch located on the side panel toward the right to the "ON" position.



Phantom power switch

Basic Operation

This section explains how to carry out basic CD-2 procedures, from recording and playback through creating a music CD.

Getting Started

- **Basic Operation 24**
  - Turning the Power On/Off 24
  - Adjusting the Screen Contrast 25
  - Adjusting the Volume 25
  - Temporarily Muting the Sound (Speaker Mute) 25
- **Inserting/Removing a CD 26**
- **Inserting/Removing a CF Card 27**

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- **Recording with the Internal Mics 30**
- **Recording from a Connected Mic or Instrument 31**
- **Layering Your Performance with a Song from a Music CD (Overdubbing) 32**
- **Layering Your Performance with a Song from a CF Card (Overdubbing) 34**
- **Settings for Recording 36**
  - Preparing a CF Card for Use (Formatting) 36
  - Choosing the CF Card Recording Mode 36
  - Selecting the Recording Source (MIC SELECT) 37
  - Adjusting the Input Level 37
  - Temporarily Adjusting the Playback Level of a Music CD or CF Card 38
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- **Playing Back a CD 40**
  - Playing Back at a Slower Speed (Slow Playback) 40
  - Making Fine Adjustments to the Playback Pitch (Pitch) 41
  - Changing the Key of the Playback (Key) 42
  - Removing the Vocal or Lead Guitar from the Playback (Center Cancel) 42
  - Repeatedly Playing Tracks (1 Track/All Repeat) 43
  - Repeatedly Playing a Section (A-B Repeat) 43
- **Playing Back a CF Card 44**
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Creating a Music CD

- **Creating a Music CD from a CF Card 46**
  - Creating a Professional-Sounding CD (Mastering Effects) 49
- **Make a Disc Playable in a Conventional CD Player (Finalize) 50**

Basic Operation

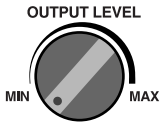
Turning the Power On/Off

Turning the Power On

NOTE

- Once the connections have been completed (Page 20), turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.
- This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

If No Other Equipment is Connected to the CD-2

1 **Turn** 

counterclockwise to "MIN" (minimum).

2 **On the rear panel, press**

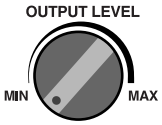
.

The power turns on. Once the power is on, the screen lights up.

If Other Equipment is Connected to the CD-2

CHECK Make sure that the device connected to the AUX OUT jack is powered off.

1 **Minimize the volume of all connected devices.**

2 **Turn** 

counterclockwise to "MIN" (minimum).

3 **On the rear panel, press**

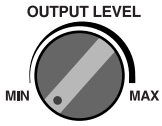
.

The power turns on. Once the power is on, the screen lights up.

4 **Power up the device connected to the AUX OUT jack.**

Turning the Power Off

If No Other Equipment is Connected to the CD-2

1 **Turn** 

counterclockwise to "MIN" (minimum).

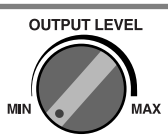
2 **On the rear panel, press**

.

The power turns off.

If Other Equipment is Connected to the CD-2

1 **Switch off the power on all connected equipment.**

2 **Turn** 

counterclockwise to "MIN" (minimum).

3 **On the rear panel, press**

.

The power turns off.

Adjusting the Screen Contrast

If you've been using the CD-2 for an extended time, or because of external temperature conditions, the characters in the screen may seem difficult to read. If this occurs, you can adjust the contrast for best visibility.

1 **Press MENU until "LCD Contrast" appears in the display, and then press ENTER.**

- You can also select this item by turning [DATA].

The following screen appears.

```
LCD Contrast
            : 5
```

2 **Turn DATA to adjust the LCD contrast.**

- You can adjust this in a range of 1–10.

3 **Press EXIT twice.**

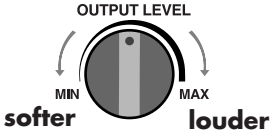
You're returned to the previous readout.

HINT

- You can also adjust the LCD contrast by holding down [MENU] and turning [DATA].

Adjusting the Volume

Turn [OUTPUT LEVEL] to adjust the volume of the CD-2's speakers and headphone jack.



MEMO

- If the AUX OUT level is set to "Variable" (Page 77), you can use [OUTPUT LEVEL] to adjust the output level of the AUX OUT jacks.

Temporarily Muting the Sound (Speaker Mute)

You can mute the sound of the internal speakers simply by pressing a button.

For example, you might find this convenient when you need to answer the telephone.

1 **Press SPEAKER MUTE.**

The button lights, and the internal speaker is silenced.

- The sound from the headphones is not silenced.

2 **When you want to once again hear the sound, press SPEAKER MUTE again.**

The button goes out, and the volume returns to the previous setting.

MEMO

- If you're recording via the internal mic ([MIC SELECT] is lit green: Page 30), no sound will be heard from the internal speaker during recording-standby mode or while recording, and [SPEAKER MUTE] will light automatically. This ensures that the sound being heard from the internal speakers will not be recorded by the internal mics.

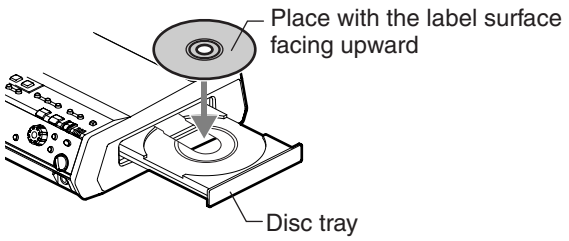
Inserting/Removing a CD

Inserting a Disc

1 Press EJECT.

The disc tray opens.

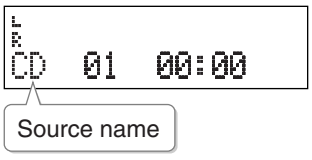
2 Place the disc on the disc tray.



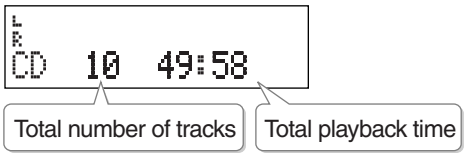
3 Press EJECT once again.

The disc tray closes.

- You can also close the disc tray by gently pressing the front of the disc tray.
- You can also close the disc tray by pressing ▶/II on the CD side. When the disc is detected, playback will begin automatically.
- When the disc has been detected, "CD" is indicated as the audio source name.



In the case of a previously recorded disc or a music CD, the total number of songs and the total playback time will be displayed when this information has been read from the disc.



Removing a Disc

1 Press EJECT.

The disc tray opens.

2 Remove the disc.

3 Press EJECT once again.

The disc tray closes.

- You can also close the disc tray by gently pressing the front of the disc tray.

If the Disc Tray Doesn't Open

If pressing [EJECT (⏏)] fails to open the disc tray, you can forcibly open the tray by pushing a straightened paper clip into the emergency eject hole.

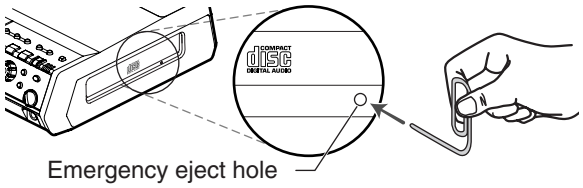
⚠ NOTE

- **Never use the emergency eject hole to open the disc tray while the CD-2 is operating.**

1 Switch off the CD-2's power.

⇨ Page 24, "Turning the Power Off"

2 Push a straightened paper clip (or similar object) into the emergency eject hole.



The disc tray is ejected forcibly.

Pull out the disc tray, and remove the disc.

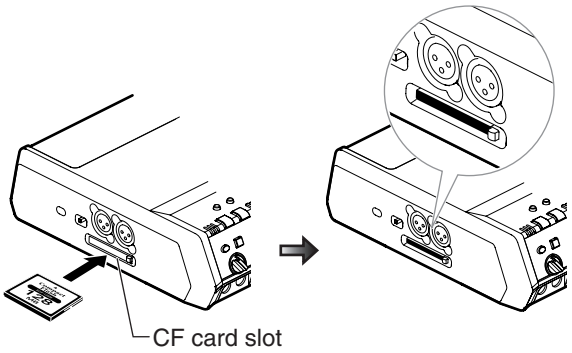
3 Push the disc tray closed.

Inserting/Removing a CF Card

Inserting a CF Card

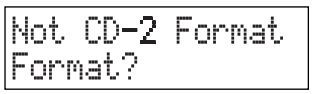
1 Insert the CF card into the CF card slot.

Carefully insert the CF card all the way in—until it is firmly in place.



- **If the CF card cannot be used in its current state by the CD-2**

  The message "Not CD-2 Format. Format?" appears.

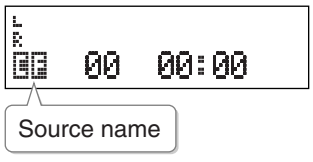
  

  In order to use this CF card with the CD-2, you will need to format it.

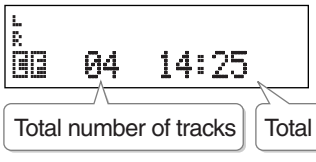
  Page 36, "Preparing a CF card for use"

- **If the CF card has already been formatted**

  When the CD-2 recognizes the CF card, "CF" is indicated as the source name.

  In the case of a previously recorded CF card, the total number of songs and the total playback time will be displayed when this information has been read from the CF card.

Removing a CF Card

NOTE

- The CD-2's power must be turned off before removing a CF card. Keep the CF card inserted while the CD-2's power is turned on.

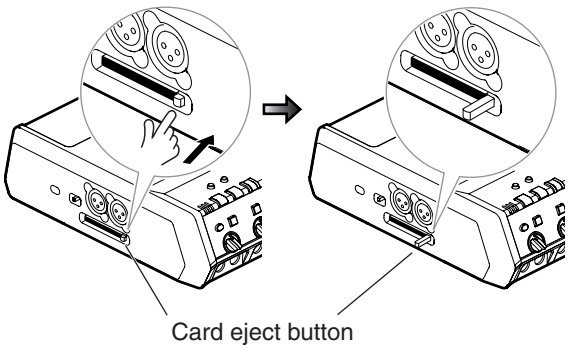
  If a CF card is removed while the CD-2's power is on, the data in the CF card may be destroyed, or the CF card may become unusable.

1 Switch off the CD-2's power.

Page 24, "Turning the Power Off"

2 Press the card eject button located at the right of the CF card slot.

The card eject button pops out.



3 Press the card eject button once again.

- Press the button in until you hear a click.

The CF card pops out slightly.

4 Grasp the CF card and pull it straight out.

NOTE

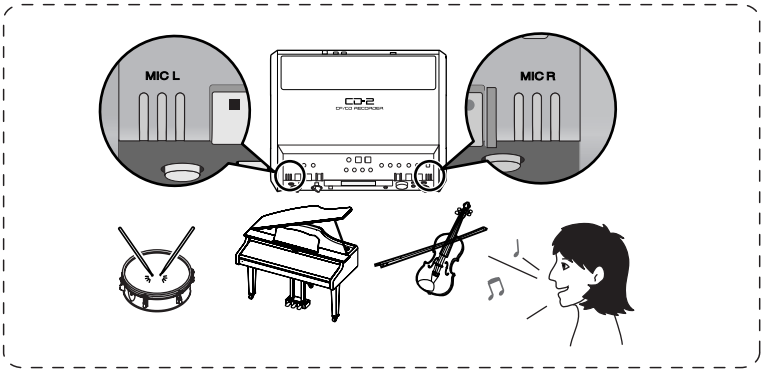
- The card eject button may be damaged if you leave it in the outward position; be sure to push it back in.

Recording on the CD-2

Three Methods of Recording

Broadly speaking, there are three methods of recording on the CD-2.

■ Recording with the CD-2's internal mics (⇨ Page 30)

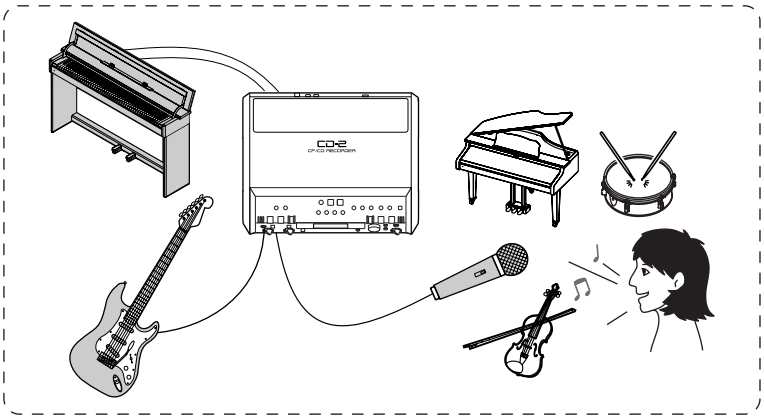


Recording →

Media that you can record to

CF cards | CD-R discs | CD-RW discs

■ Recording from a Connected Mic or Instrument (⇨ Page 31)



Recording →

Media that you can record to

CF cards | CD-R discs | CD-RW discs

■ Layering a performance with the playback of a music CD or CF card (Overdubbing)

① Layering a performance with a song from a music CD (⇨ Page 32)

For example, if you play back a karaoke CD and sing along, the karaoke accompaniment and your voice will be recorded together.

② Layering a performance with a song recorded to a CF card (⇨ Page 34)

For example, let's suppose you've recorded a piano performance onto a CF card. Then, while playing back the recorded piano performance, you can sing along and record the piano performance and your vocal together. A new song containing the piano and vocal will be created on the CF card.

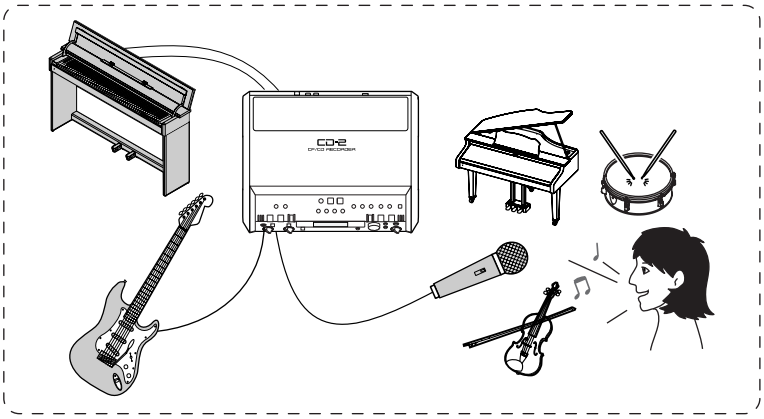
Playing

① Music CD

or

② CF card

+



Recording →

Media that you can record to

CF cards

Cautions When Recording on a CF Card or CD-R/RW Disc

■ Minimum Recording Rime for One Track

Each track on a music CD must be at least four seconds long. Since the CD-2 creates music CDs from the songs you record, it does not allow you to record a track that is less than four seconds long.

Pressing [Stop (■)] or [Pause (►/II)] will not stop recording if less than four seconds have passed since you began recording. Moreover, you cannot assign a track number (⇨ Page 55) in such cases.

■ In Case Your Performance is Not Recordable

Further recording is not possible once you have reached the maximum recordable time or the maximum number of songs that can be recorded.

- If there is no more recordable time, the message "CF Card Full" or "CD Disc Full" will appear.
- If the maximum number of tracks have already been recorded, the message of "CF Track Full" or "CD Track Full" will appear.

  This message goes away when you press [ENTER].

  If you're using a CF card or a CD-RW disc, you can erase unwanted songs (⇨ Page 58, 64) and then continue recording.

When Recording on a CF card

■ Recording Modes and Maximum Recording Times

When using a CF card for recording, you can select one of three recording modes as appropriate for the desired recording time and audio quality (⇨ Page 36).

The following table shows the maximum recording times possible with each recording mode on various capacities of media.

Capacity	Maximum recording time (approx.)		
	Recording mode		
	Standard	Long	WAV
16 MB	3 minutes	6 minutes	1.5 minutes
32 MB	6 minutes	12 minutes	3 minutes
64 MB	12 minutes	24 minutes	6 minutes
128 MB	24 minutes	49 minutes	12 minutes
256 MB	49 minutes	98 minutes	24 minutes
512 MB	98 minutes	196 minutes	49 minutes
1 GB	196 minutes	392 minutes	98 minutes
2 GB	392 minutes	784 minutes	196 minutes

- The maximum times given above are approximate. The actual time may be slightly less depending on how tracks have been edited.
- You can view the remaining time in the display. ⇨ Page 75, "Displaying the Remaining Time"
- Tracks using differing recording modes may be recorded on a single CF card.

When Recording on a CF card (continued)

■ Recording Time for One Track (One Song)

The maximum length of one track is three hours.

If a recording exceeds three hours, a new track division will automatically be created.

■ The Number of Recording Tracks for One CF Card

A maximum of 99 tracks can be recorded on one CF card.

When Recording on a CD-R/RW disc

■ Maximum Recording Times

Capacity	Maximum recording time
650 MB	approximately 74 minutes
700 MB	approximately 80 minutes

- The maximum times given above are approximate. The actual time may be slightly less depending on the number of tracks that are recorded.
- You can view the remaining time in the display. ⇨ Page 75, "Displaying the Remaining Time"

■ Types of Discs that You Can Record

CD-R discs	• Blank CD-R discs • Partially recorded (not yet finalized) CD-R discs
CD-RW discs	• Blank CD-RW discs • Partially recorded (not yet finalized) CD-RW discs

- "**Blank disc**" refers to an "empty" disc on which nothing has been recorded or stored.

■ The Number of Recording Tracks on One CD-R/RW Disc

A maximum of 99/98 tracks can be recorded on one CD-R/RW disc respectively.

■ Recorded Songs

When you record on a CD-R/RW disc, a blank space of two seconds will automatically be added at the end of each track (song).

■ Finalization (⇨ Page 50)

"Finalization" is a process that can be applied to a CD-R/RW disc so that it will be playable by a conventional CD player. Once a CD-R disc or CD-RW disc has been finalized, it can be played back as a music CD in a CD player that supports CD-R or CD-RW playback.

No further songs can be recorded on a CD-R/RW disc that has been finalized.

- If you're using a CD-RW disc, you can remove the finalization and add additional material. ⇨ Page 65, "Removing Finalization"

Recording with the Internal Mics

Here's how to record a vocal or instrumental performance via the CD-2's internal mics (see the illustration below).

You can record to either a CF card or a CD-R/RW disc.

HINT

- You can check the amount of time that remains on the media. ⇨ Page 75, "Displaying the Remaining Time"
- You can increase the amount of free space on a CF card or CD-RW by deleting unwanted tracks.

  CF card ⇨ Page 58, CD-RW disc ⇨ Page 64
- If you're recording to a CF card, you can select the recording mode that's appropriate for the content you're recording. ⇨ Page 36, "Choosing the CF Card Recording Mode"

MEMO

- The sound from the internal mics will not be heard from the internal speakers. You'll need to use headphones in order to audition the sound from the internal mics.
- Since the CD-2 is equipped with highly-sensitive mics, undesired sounds such as the operating noise of the CD-R/RW drive* or the sound of buttons being pressed may be recorded inadvertently.

  If you notice such problems, you can try lowering the input level of the internal mics. ⇨ Page 37, "Adjusting the Input Level: Internal Mic"

  * *If you're recording to a CF card, no CD-R/RW drive operating noise will be recorded.*
- Depending on where the CD-2 is positioned in relation to the sound source, the recorded sound may not be evenly distributed between the left and right speakers. In such cases, you can adjust the left/right volume balance of the internal mics and record your performance again. ⇨ Page 39, "Adjusting the Left/Right Volume Balance of the Internal Mics"

1 Power up the CD-2.

⇨ Page 24, "Turning the Power On"

2 Make preparations for recording.

① Insert a CF card or CD-R/RW disc.

⇨ Page 27, "Inserting a CF Card"

- If the message "Not CD-2 Format" appears, format the card as described in "Preparing a CF Card for Use." (Page 36)

⇨ Page 26, "Inserting a Disc"

② Press MIC SELECT enough times to get it to light in green.

This means that you'll be recording the sound from the internal mics.

⇨ Page 37, "Selecting the Recording Source"

③ Adjust the input level of the internal mics.

- If Auto Level Control (⇨ Page 76) is "On," the input level of the internal mics will be adjusted automatically. You won't need to adjust the internal mic input level.

  When the CD-2 is shipped from the factory, Auto Level Control is turned "On."

- If Auto Level Control is "Off," you'll need to manually adjust the internal mic input level.

  ⇨ Page 37, "Adjusting the Input Level: Internal Mic"

3 Press .

- Press the button for the media (CF card or CD) on which you want to record.

The button starts blinking red, and the CD-2 enters recording-standby mode.

4 Press ▶/II.

- Press the button for the media (CF card or CD) on which you want to record.

Recording begins.

5 When you're finished recording, press .

- Press the button for the media (CF card or CD) on which you have been recording.

A new track is created at the end of the CF card or CD-R/RW disc.

MEMO

- A CD-R/RW disc must be finalized before it can be played back by a conventional CD player. ⇨ Page 50, "Make a Disc Playable in a Conventional CD Player"

Recording from a Connected Mic or Instrument

This section explains how to connect mics or instruments to the CD-2, and record a vocal or instrumental performance. You can record to either a CF card or a CD-R/RW disc.

HINT

- You can check the amount of time that remains on the media. ⇨ Page 75, "Displaying the Remaining Time"
- You can have the CD-2 sound a count-in before recording starts. ⇨ Page 53, "Sounding a Count-In to Ensure Accurate Timing"
- You can have recording be started automatically as soon as you begin performing. ⇨ Page 54, "Automatically Starting Recording When Sound Begins"
- You can delete unwanted tracks to increase the free space on a CF card or CD-RW disc.
  CF card ⇨ Page 58, CD-RW disc ⇨ Page 64
- If you're recording to a CF card, you can select the recording mode that's appropriate for the content you're recording. ⇨ Page 36, "Choosing the CF Card Recording Mode"
- You can use a foot switch to start/pause recording. ⇨ In Step 2 of "Specifying the function of the foot switch" on Page 76, choose "Play" and operate the foot switch.

1 Connect your mic(s) or instrument(s) (e.g., guitar or keyboard).

⇨ Page 20, "Connecting Other Equipment"

2 Power up the CD-2.

⇨ Page 24, "Turning the Power On"

3 Make preparations for recording.

① Insert a CF card or CD-R/RW disc.

⇨ Page 27, "Inserting a CF Card"

- If the message "Not CD-2 Format" appears, format the card as described in "Preparing a CF Card for Use." (Page 36)

⇨ Page 26, "Inserting a Disc"

② Press MIC SELECT enough times to get it to light in orange.

- The sound from a mic or instrument connected to the MIC 1/MIC 2/GUITAR/LINE IN jacks will be selected for recording.

⇨ Page 37, "Selecting the Recording Source"

- If you're recording only the sound from a device connected to the LINE IN jacks, press [MIC SELECT] so it is not lit.

⇨ Page 37, "Auditioning the sound of an instrument connected to the LINE IN jacks"

③ Adjust the input level.

⇨ Page 38, "Adjusting the Input Level: MIC 1/MIC 2/GUITAR/LINE IN Jacks"

Only if you're recording from connected mics

④ Specify the panning (stereo position) of the mics.

⇨ Page 39, "When recording from connected mics"

4 Press .

- Press the button for the media (CF card or CD) on which you want to record.

The button starts blinking in red, and the CD-2 enters recording-standby mode.

5 Press .

- Press the button for the media (CF card or CD) on which you want to record.

Recording begins.

6 When you're finished recording, press .

- Press the button for the media (CF card or CD) on which you have been recording.

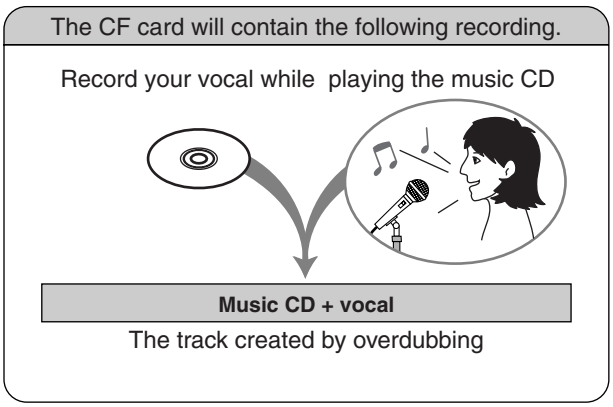
A new track is created at the end of the CF card or CD-R/RW disc.

MEMO

- A CD-R/RW disc must be finalized before it can be played back by a conventional CD player. ⇨ Page 50, "Make a Disc Playable in a Conventional CD Player"

Layering Your Performance with a Song from a Music CD (Overdubbing)

While you play back a music CD, you can add your own vocal or instrumental performance and record the combined result on a CF card. This process is called "overdubbing."


The CF card will contain the following recording.
Record your vocal while playing the music CD
Music CD + vocal
The track created by overdubbing

MEMO

- The track created by overdubbing will be at the end of the CF card.
- The metronome cannot be used while overdubbing a performance with a music CD (⇨ Page 52).

HINT

- You can check the amount of recording time that remains on the CF card. ⇨ Page 75, "Displaying the Remaining Time"
- You can increase the amount of free space on a CF card by deleting unwanted tracks. ⇨ Page 58
- You can use the Center Cancel function to create a karaoke CD by removing a vocal from a CD that contains a vocal.

  ⇨ Page 42, "Removing the Vocal or Lead Guitar from the Playback"

  * *On some CD tracks (songs), this may not produce the desired result.*
- You can select the recording mode that's appropriate for the content you're recording. ⇨ Page 36, "Choosing the CF Card Recording Mode"
- You can use a foot switch to start/pause recording. ⇨ In Step 2 of "Specifying the function of the foot switch" on Page 76, choose "Play" and operate the foot switch.

1 Connect your mic(s).

⇨ Page 20, "Connecting Other Equipment"

2 Power up the CD-2.

⇨ Page 24, "Turning the Power On"

3 Make preparations for recording.

① Insert a CF card.

⇨ Page 27, "Inserting a CF Card"

- If the message "Not CD-2 Format" appears, format the card as described in "Preparing a CF Card for Use." (Page 36)

② Press MIC SELECT enough times to get it to light in orange.

- "The sound from the mic connected to the MIC 1/MIC 2 jacks" will be selected for recording.

⇨ Page 37, "Selecting the Recording Source"

③ Adjust the input level.

⇨ Page 38, "Adjusting the Input Level: MIC 1/MIC 2/GUITAR/LINE IN Jacks"

④ Set the panning (stereo position) of the mics.

⇨ Page 39, "When recording from connected mics"

4 Prepare the music CD.

① Insert the music CD.

⇨ Page 26, "Inserting a Disc"

② Press ■ on the CD side.

The CD is selected as the source.

③ Press ⏮ or ⏭ to select the track that you want to play back.

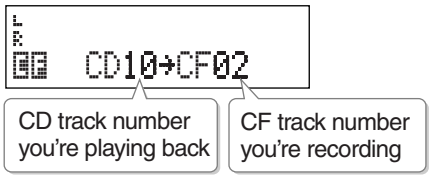
④ Adjust the playback level of the music CD.

⇨ Page 38, "Temporarily Adjusting the Playback Level of a Music CD or CF Card"

If necessary, you can also adjust the input level of the mic or guitar so that the overall balance is appropriate (Step 3-③).

5 Repeatedly press OVER DUBBING until "CD →CF" appears in the display.

Now you are ready for overdubbing.



MEMO

- **Canceling overdubbing**

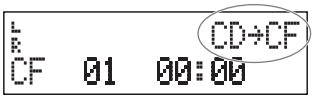
  To cancel overdubbing, repeatedly press [OVERDUBBING] until its indicator goes out.

  You can also cancel overdubbing by pressing ■ on the CF card side.

6 Press ▶/II on the CF card side.

The music CD track you selected in Step 4 begins playing, and recording on the CF card begins simultaneously. Record your vocal or instrumental performance.

- If you're overdubbing with a song from a music CD, the upper right of the screen will indicate "CD→CF."



When the music CD track ends, recording ends automatically (the music CD stops playing).

A new track is created at the end of the CF card.

MEMO

- If you decide to stop recording midway through the track, press ■ on the CF card side.

HINT

- You can connect an instrument instead of a mic, and overdub your own instrumental performance along with the playback from a "minus-one" CD.
- You can also use the internal mics for recording instead of connecting a mic.

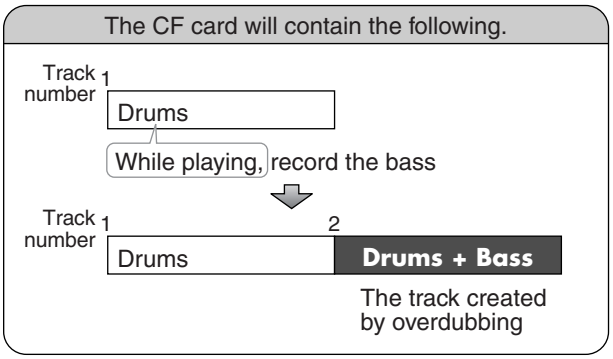
  In this case, follow Steps 1–2 of "Recording with the Internal Mics" (⇨ Page 30) instead of Steps 1–3.

  If you're recording using the internal mics, you won't hear any sound from the internal speakers. You'll need to use headphones to monitor your performance.

Layering Your Performance with a Song from a CF Card (Overdubbing)

While playing back a previously recorded performance from a CF card, you can layer—or "overdub"—another vocal or instrumental performance and record the combined result to a new track.

Since you can continue overdubbing parts, you can create a song by adding elements one at a time. For example, you can start with drums, then add bass, and then a vocal, and so on.



MEMO

- The new track created by overdubbing is placed at the end of the CF card.

HINT

- You can switch the time display to show the remaining recording time on the CF card. ⇨ Page 75, "Displaying the Remaining Time"
- You can select the recording mode that's appropriate for the content you're recording. ⇨ Page 36, "Choosing the CF Card Recording Mode"
- You can increase the free space available on a CF card by deleting unwanted tracks. ⇨ Page 58
- You can have the CD-2 sound a count-in before recording starts. ⇨ Page 53, "Sounding a Count-In to Ensure Accurate Timing"
- You can use a foot switch to start/pause recording. ⇨ In Step 2 of "Specifying the function of the foot switch" on Page 76, choose "Play" and operate the foot switch.

1 Connect your mic or guitar.

⇨ Page 20, "Connecting Other Equipment"

2 Power up the CD-2.

⇨ Page 24, "Turning the Power On"

3 Make preparations for recording.

① Insert a CF card.

⇨ Page 27, "Inserting a CF Card"

② Press MIC SELECT enough times to get it to light in orange.

- "The sound from the mic or instrument connected to the MIC 1/MIC 2/GUITAR/LINE IN jacks" will be selected for recording.

⇨ Page 37, "Selecting the Recording Source"

- If you're recording only the sound from a device connected to the LINE IN jacks, press [MIC SELECT] so it is not lit.

⇨ Page 37, "Auditioning the sound of an instrument connected to the LINE IN jacks"

③ Adjust the input level.

⇨ Page 38, "Adjusting the Input Level: MIC 1/MIC 2/GUITAR/LINE IN Jacks"

Only if you're recording from connected mics

④ Set the panning (stereo position) of the mics.

⇨ Page 39, "When recording from connected mics"

4 Preparing the CF Card

① Press ■ on the CF card side.

The CF card is selected as the source.

② Press ◀◀ or ▶▶ to select the track that you want to play back.

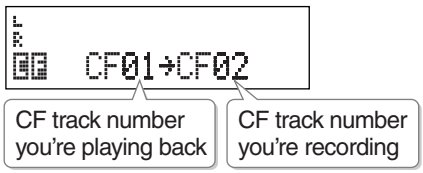
③ Adjust the playback level of the CF card.

⇨ Page 38, "Temporarily Adjusting the Playback Level of a Music CD or CF Card"

If necessary, you can also adjust the input level of the mic or guitar so that the overall balance is appropriate (Step 3-③).

5 Repeatedly press OVER DUBBING until "CF →CF" appears in the display.

Now you are ready for overdubbing.



MEMO

- **Canceling overdubbing**

  To cancel overdubbing, repeatedly press [OVERDUBBING] until its indicator goes out.

  You can also cancel overdubbing by pressing ■ on the CF card side.

6 On the CF card side, press ▶/II.

Recording begins. While you listen to the playback of the track you selected in Step 4, perform your additional vocal or instrumental part to record it.

- If you're overdubbing with a song from a CF card, the upper right of the screen will indicate "CF→CF."

7 When you're finished recording, press ■ on the CF card side.

The newly recorded track is added at the end of the CF card. Play back the last track (⇨ Page 44) to hear the result of your overdubbing.

Settings for Recording

Preparing a CF Card for Use (Formatting)

When you insert a CF card, the CD-2 determines if it can use the card in its current state. If the message "Not CD-2 Format" appears, the CF card will have to be formatted before it can be used with the CD-2.

NOTE

- **Never turn off the power or remove the CF card while formatting is being carried out.** Doing so may destroy the data on the CF card or render the CF card unusable.
- Formatting a CF card erases all data currently residing on the card.

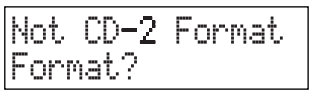
MEMO

- The included CF card has already been formatted.
- If the CF card has already been formatted on the CD-2, you don't need to format it again. Simply continue using it.

1 Insert the CF card into the CF card slot.

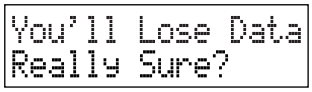
Page 27, "Inserting a CF Card"

The message "Not CD-2 Format. Format?" appears.



2 Press ENTER.

The "You'll Lose Data. Really Sure?" message appears.



3 To format the card, press ENTER.

(If you decide to cancel, press EXIT.)

Formatting begins. Once the formatting has been successfully completed, the following screen appears.

Choosing the CF Card Recording Mode

When you use a CF card to record, you can choose one of three recording modes as appropriate for the desired audio quality and recording time.

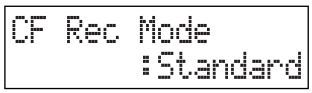
MEMO

- You can't change the recording mode while recording; you must choose the desired recording mode before you record.
- You are free to select a different recording mode each time you record. Also, a single CF card can hold and play back recordings that were made with different recording modes.
- The sampling rate is fixed at 44.1 kHz.
- There is no recording mode setting for a CD-R/RW disc.

1 Press MENU until "CF Rec Mode" appears in the display, and then press ENTER.

- You can also select this item by turning [DATA].

The following screen appears.



2 Turn DATA to select the desired recording mode.

Standard: Standard recording.
Normally, you should choose this mode.

Long: Extended recording.
This recording mode is suitable for recording lectures or live performances.

WAV: High-quality recording.
The audio will be recorded as a wave file (WAV format). Choose this mode if you will be transferring the audio data to your computer.

- For the approximate recording times available for each mode Page 29, "Recording Modes and Maximum Recording Times"
- If desired, a track you recorded in "Standard" or "Long" mode can be converted to a wave file (WAV format) after recording.

Page 63, "Converting a Track to a Wave File"

3 Press EXIT twice.

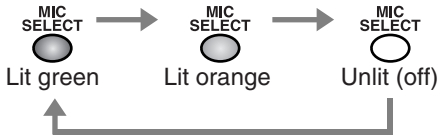
You're returned to the previous readout.

Selecting the Recording Source (MIC SELECT)

Select the audio source that you want to record.

1 Press MIC SELECT enough times to choose the audio source you want to record.

Each time you press [MIC SELECT], its button will change color. Press the button until it is lighted in the appropriate color, the one corresponding to the audio source you want to record.



	Audio source that will be recorded
Lit green	The internal mics
Lit orange	• Mics connected to the MIC1/MIC2 jacks • An instrument (guitar or bass) connected to the GUITAR jack
Unlit (off)	The internal mics or a mic or guitar connected to the MIC1/MIC2/GUITAR jacks will not be recorded. Choose the off (unlit) setting if you're not recording a mic or guitar.

MEMO

- If cables are plugged into both the MIC 1 (XLR-type or phone-type) and the GUITAR jack, the input from MIC 1 jack will be cancelled.
- If you're recording from the internal mics ([MIC SELECT] is lit green), the sound of the internal mics will not be heard from the speakers. You'll need to use headphones if you want to audition the sound of the internal mics.

NOTE

- You must not connect a mic to both MIC jacks (XLR-type and phone-type) of the same number. Doing so will damage the mic and/or the CD-2.

■ Auditioning the sound of an instrument connected to the LINE IN jacks

The sound from the LINE IN jacks is always active, regardless of the [MIC SELECT] setting.

- If you want to record only the sound of an instrument connected to the LINE IN jacks, turn [MIC SELECT] off (unlit).
- If you don't want to record the sound of an instrument connected to the LINE IN jacks, turn the line input "Off." ⇨ Page 78, "Switching the Line Input On/Off"
Sound will no longer be input via the LINE IN jacks.

Adjusting the Input Level

Internal Mic

If Auto Level Control (⇨ Page 76) is "Off," you'll need to adjust the internal mic input level manually.

CHECK Make sure that [MIC SELECT] is **lit green**. ⇨ Page 37

MEMO

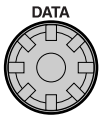
- If Auto Level Control (⇨ Page 76) is "On," the input level of the internal mics will be adjusted automatically. You won't need to adjust the internal mic input level.
  When the CD-2 is shipped from the factory, Auto Level Control is turned "On."
- The sound from the internal mics will not be heard from the internal speakers. You'll need to use headphones in order to audition the sound from the internal mics.

1 Press MENU until "Int MIC Gain" appears in the display, and then press ENTER.

- You can also select this item by turning [DATA].

The following screen appears.

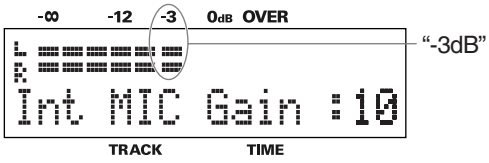
2 While listening to the sound, turn DATA to adjust the input level.



- You can adjust the input level in a range of 1–50.

POINT

For best results, adjust the level so that the level meter briefly reaches "-3 dB" when you play strongly or speak loudly.



3 Press EXIT twice.

You're returned to the previous readout.

Adjusting the Input Level (continued)

MIC 1/MIC 2/GUITAR/LINE IN Jacks

Here's how to adjust the input level of the input jacks (MIC 1/MIC 2/GUITAR/LINE IN jacks) to which you've connected mics or instruments.

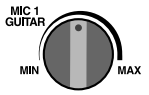
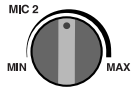
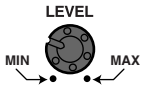
CHECK

Make sure that [MIC SELECT] is **lit orange**. ⇨ Page 37

* If you want to record only from a device connected to the LINE IN jacks, make sure that [MIC SELECT] is **not lighted**.

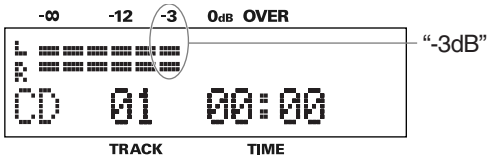
1 While you listen to the sound, turn the appropriate level knob to adjust the input level.

The different input jacks are controlled by the following level knobs.

Jack name	Level knob
MIC 1 GUITAR	 * Front panel
MIC 2	 * Front panel
LINE IN	 * Rear panel

POINT

For best results, adjust the level so that the level meter briefly reaches "-3 dB" when you play strongly or speak loudly.



MEMO

- Adjust [OUTPUT LEVEL] so that you can comfortably listen to the connected instrument or mic. Adjusting this volume will not affect the sound (input level) that's being recorded. ⇨ Page 25, "Adjusting the Volume"

Temporarily Adjusting the Playback Level of a Music CD or CF Card

If you're playing back a music CD or CF card while recording an additional vocal or instrument "layered" onto it (⇨ Page 32, 34), you may need to adjust the volume of the music CD or CF card to create the correct balance.

In such cases, you can adjust the playback level of the music CD or CF card to create the desired balance.

1 Press ▶/II for the media (CD or CF) whose playback level you want to adjust.

2 Turn DATA to adjust the playback level.

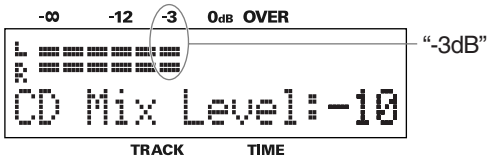
When you turn [DATA], the playback level of the music CD or CF card is displayed.

"CF Mix Level" when using a CF card

- You can adjust the level in a range of -50– +25.
- A setting of "0" is the original playback level.

POINT

For best results, adjust the level so that the level meter briefly reaches "-3 dB" when the sound from the music CD or CF card is mixed with the sound of the mic or instrument.



3 When you've finished adjusting the playback level, press ■.

- Press the button for the media (CF card or CD) you're playing.
- If you do not operate the [DATA] dial for five seconds, you will be automatically returned to the previous readout.

MEMO

- Noise may occur if you adjust the playback level during playback. This is normal and does not indicate a malfunction.
- The playback level setting you adjust here is temporary, and will be cleared when you turn off the power. It will be returned the original playback level the next time you turn on the power. If you want to keep the playback level setting, make settings as described in ⇨ Page 79, "Adjusting the Playback Level of a Music CD/CF Card."

When Recording from Connected Mics (Pan Setting)

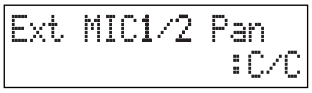
"Pan" refers to the left/right position of the sound. On the CD-2, the pan of the mics connected to the MIC1 and MIC2 jacks can be set to left, right, or center.

When using two mics to record a lecture or band performance, you can set the pan to left and right so that the natural spaciousness of the sound is captured (i.e., stereo recording).

1 Press MENU until "Ext MIC1/2 Pan" appears in the display, and then press ENTER.

- You can also select this item by turning [DATA].

The following screen appears.



2 Turn DATA to select how MIC 1 and MIC 2 are to be panned.

	MIC 1	MIC 2
L/R	Left	Right
C/C	Center	Center
R/L	Right	Left
L/C	Left	Center
R/C	Right	Center
C/L	Center	Left
C/R	Center	Right

- Normally, you should choose "C/C" when recording a solo performer. You should also choose "C/C" if you're recording from a single mic.

  Choose "L/R" when recording a band performance or a lecture.

3 Press EXIT twice.

You're returned to the previous readout.

Adjusting the Left/Right Volume Balance of the Internal Mics

When you record via the internal mics, the left and right channels of the recorded sound may be perceived as not being balanced, depending on the location in which the CD-2 is placed.

For example, if the CD-2 has been placed at an angle relative to the audio source you're recording, the sound from the mic that is closer to the audio source will sound louder.

You can adjust the left/right volume balance of the internal mics as appropriate for the location in which the CD-2 is placed.

CHECK Make sure that [MIC SELECT] is **lit green**.
⇨ Page 37

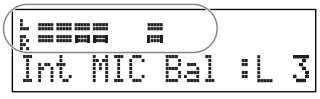
1 Press MENU until "Int MIC Bal" appears in the display, and then press ENTER.

- You can also select this item by turning [DATA].

The following screen appears.

2 While making sound, adjust the volume balance of the L and R channels.

Adjust the volume balance so that the L and R meters show approximately the same level.



- You can adjust the balance from L50–R50. The center position (C) indicates that both microphones will pick up sound at equal level.

  When set to L50, no sound will be picked up by the R channel mic. When set to R50, no sound will be picked up by the L channel mic.

3 Press EXIT twice.

You're returned to the previous readout.

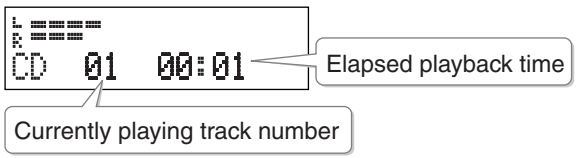
Playing Back a CD

1 Insert the CD.

⇨ Page 26, “Inserting a Disc”

2 On the CD side, press ▶/II.

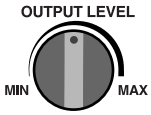
The CD is selected as the audio source, and playback begins.



MEMO

- You can switch the time display to show the remaining playback time. ⇨ Page 75, “Displaying the Remaining Time”

3 Turn OUTPUT LEVEL to adjust the volume.



To do this	Perform this action
Stop playback	**Press the CD ■.** If you press this button while stopped, you will return to the first track.
Pause playback	**Press the CD ▶/II.** Press it once again to resume playback from the point at which you paused.
Go to the beginning of a track (Skip)	**Press ⏮.** Each time you press this button, you go back by one track. If you press this button during playback, you will return to the beginning of the track that was playing. **Press ⏭.** Each time you press this button, you advance to the next track.
Skip between songs at high-speed	**While stopped, press and hold ⏮ or ⏭.**
Rewind/ fast-forward (Search)	**During playback, press and hold.** ⏪ : Rewind./ ⏩ : Fast-forward.
High-speed rewind/ fast-forward	**While paused, press and hold ⏪ or ⏩.**

Playing Back at a Slower Speed (Slow Playback)

You can play back the CD slowly without changing the pitch of the sound. This is convenient when you want to play your instrument along with a “minus-one” CD, or to learn phrases by ear.

MEMO

- Slow Playback is a CD-only function. You can’t use it with a CF card.

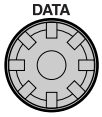
HINT

- When you’re practicing difficult phrases, you may find it convenient to use the A-B Repeat function (⇨ Page 43) in conjunction with the Slow Playback function.

1 Press SPEED.

The CD speed control screen appears.

2 Turn DATA to adjust the CD playback speed.



- You can adjust the speed in a range of -50 (half speed) through 0 (normal speed).

3 Press EXIT.

You’re returned to the previous readout.

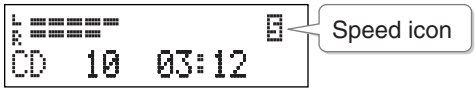
Thereafter, the CD will play back at the speed you specified in Step 2.

MEMO

- For some tracks (songs), decreasing the speed might make the notes more difficult to distinguish.
- **Icon indication**

  The speed icon is displayed if you’ve changed the playback speed.

  The speed icon disappears if you set the Speed to “0” in Step 2.



Making Fine Adjustments to the Playback Pitch (Pitch)

You can make fine adjustments (of less than a semitone) to the pitch of the CD playback.

Sometimes when you are practicing your instrument along with a CD, you may have difficulty because the CD playback is pitched slightly different than your instrument. In such cases, you can adjust the CD playback pitch to match your instrument.

Even if you're using an instrument that is not easily tuned, such as an acoustic piano, you can adjust the pitch of the CD so that it matches your instrument.

MEMO

- Pitch adjustment is a CD-only function. You can't use it with a CF card.

1 Press PITCH until "Pitch" appears in the display.

2 Turn DATA to adjust the CD playback pitch.

- The range of adjustment available for the pitch is -50 cents through +50 cents.
- A setting of "0" produces the original pitch.

HINT

- If you have a CD that was recorded at a reference pitch of A=440 Hz, and you want to play it back at a reference pitch of A=442 Hz, you would set Pitch to "+8." Refer to the table below.

Pitch setting	Reference pitch (Hz) after adjustment
-8	438
-4	439
0	440
+4	441
+8	442

MEMO

- One cent is 1/100th of a semitone; i.e., a semitone is 100 cents.

3 Press EXIT.

You're returned to the previous readout.

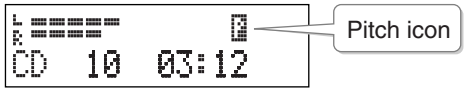
Thereafter, the CD will play back at the pitch you specified in Step 2.

MEMO

- **Icon indication**

  The Pitch icon is displayed if you've changed the Pitch setting.

  The Pitch icon disappears if you set the Pitch to "0" in Step 2.



Changing the Key of the Playback (Key)

You can raise or lower the key of the CD playback.
This can be useful in situations like the following.

- You want to practice flute along with an accompaniment CD that was created for alto sax.
- You want to sing along with a karaoke CD at a key that's easier for you to sing.

MEMO

- Key change is a CD-only function. You can't use it with a CF card.

1 Press PITCH until "Key" appears in the display.

2 Turn DATA to adjust the CD playback key.

- You can adjust the key in semitone steps over a range of -6 through +5.
  "+" (positive): Raise the key
  "-" (negative): Lower the key
- "0" returns to the original key.

3 Press EXIT.

You're returned to the previous readout.

Thereafter, the CD will play back at the key you specified in Step 2.

MEMO

- **Icon indication**

  The Key icon is displayed if you've changed the Key setting.

  The Key icon disappears if you set the Key to "0" in Step 2.

Removing the Vocal or Lead Guitar from the Playback (Center Cancel)

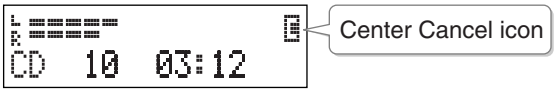
You can remove the main vocal or lead guitar from the playback of a CD, or make it less audible.
This is useful when you want to use a favorite CD to practice soloing or to enjoy karaoke.

MEMO

- Center Cancel is a CD-only function. You can't use it with a CF card.

1 Press CENTER CANCEL.

The Center Cancel function is turned on, and the " " icon appears.



From this point on, the sound of the main vocal or lead guitar is eliminated from the playback.

- Depending on the track (song) you're playing back, you may not obtain the desired result.

2 When you want to return to normal CD playback, press CENTER CANCEL again.

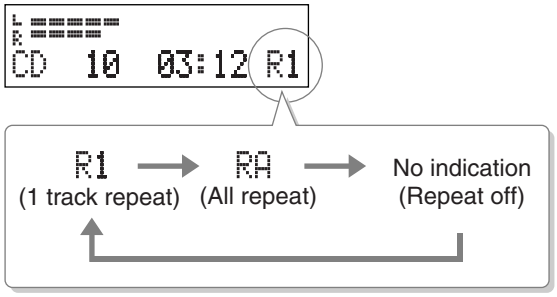
The Center Cancel function is turned off, and the " " icon disappears.

Repeatedly Playing Tracks (1 Track/All Repeat)

You can have a favorite track (or all tracks) play back repeatedly.

1 Press 1/ALL to select Repeat mode.

Each time you press the button, the Repeat mode indication will change as follows.



1 track repeat: The currently playing track, or any track you play subsequently, will play back repeatedly.

All repeat: All tracks will play repeatedly. If you select this during playback, all tracks will play repeatedly, starting with the currently playing track.

Repeat off: The Repeat Play function is cancelled.

MEMO

- **To cancel Repeat Play**

  To cancel Repeat Play, press [1/ALL] several times until the R1 / RA icon disappears.

  If you open the CD disc tray or cycle the power to the CD-2, the R1 / RA icon disappears and the Repeat Play function is cancelled.

Repeatedly Playing a Section (A-B Repeat)

You can have a specified section play back repeatedly.

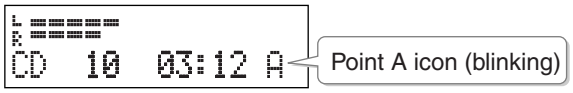
Repeatedly listening to a section of a song is convenient when you're practicing your instrument along with the song, or learning the song by ear.

HINT

- If you're learning a difficult phrase by ear, you may find it convenient to use the A-B Repeat function together with the Slow Play function (Page 40).

1 While a CD is playing, press A-B at the point where you want Repeat Play to start.

The starting point (A) of A-B Repeat playback is registered, and the point A icon blinks.



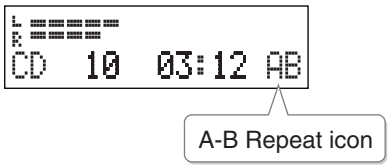
2 Press A-B at the point where you want A-B Repeat to end.

The end point (B) of A-B Repeat playback is registered, and the A-B region will play back repeatedly.

MEMO

- **Icon indication**

  The A-B Repeat icon is displayed during A-B Repeat playback.



- **Canceling A-B Repeat**

  During A-B Repeat playback, press [A-B]; the A-B Repeat function is cancelled, and you are returned to normal playback.

  If you press ■ on the CD side, A-B Repeat will be cancelled, and the CD playback will stop.

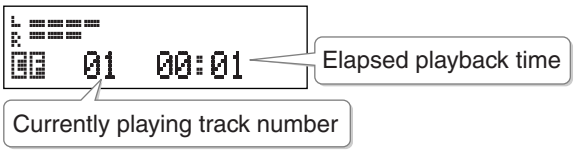
Playing Back a CF Card

1 Insert the CF card.

⇨ Page 27, "Inserting a CF Card"

2 On the CF card side, press ▶/II.

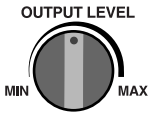
The CF card is selected as the source, and playback begins.



MEMO

- You can switch the time display to show the remaining playback time. ⇨ Page 75, "Displaying the Remaining Time"

3 Turn OUTPUT LEVEL to adjust the volume.



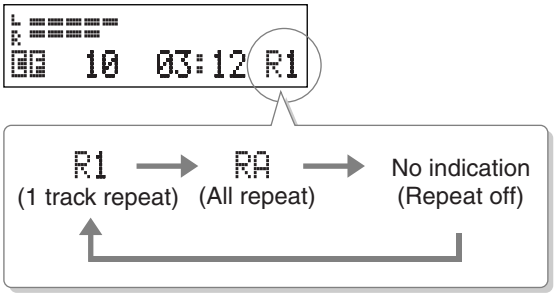
To do this	Perform this action
Stop playback	**Press the CF ■.** If you press this button while stopped, you will return to the first track.
Pause playback	**Press the CF ▶/II.** Press it once again to resume playback from the point at which you paused.
Go to the beginning of a track (Skip)	**Press ⏮.** Each time you press this button, you go back by one track. If you press this button during playback, you will return to the beginning of the track that was playing. **Press ⏭.** Each time you press this button, you advance to the next track.
Skip between songs at high-speed	**While stopped, press and hold ⏮ or ⏭.**
Rewind/ fast-forward (Search)	**During playback, press and hold.** ⏮ : Rewind./ ⏭ : Fast-forward.
High-speed rewind/ fast-forward	**While paused, press and hold ⏮ or ⏭.**

Repeatedly Playing Tracks (1 Track/All Repeat)

You can have a favorite track (or all tracks) play back repeatedly.

1 Press 1/ALL to select Repeat mode.

Each time you press the button, the Repeat mode indication will change as follows.



1 track repeat: The currently playing track, or any track you play subsequently, will play back repeatedly.

All repeat: All tracks will play repeatedly. If you select this during playback, all tracks will play repeatedly, starting with the currently playing track.

Repeat off: The Repeat Play function is cancelled.

MEMO

- **To cancel Repeat Play**

  To cancel Repeat Play, press [1/ALL] several times until the R1 / RA icon disappears.

  If you cycle the power to the CD-2, the R1 / RA icon disappears and the Repeat Play function is cancelled.

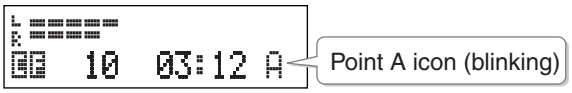
Repeatedly Playing a Section (A-B Repeat)

You can have a specified section play back repeatedly.

Repeatedly listening to a section of a song is convenient when you're practicing your instrument along with the song, or learning the song by ear.

1 While a CF card is playing, press A-B at the point where you want Repeat Play to start.

The starting point (A) of A-B Repeat playback is registered, and the point A icon blinks.



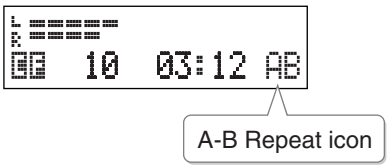
2 Press A-B at the point where you want A-B Repeat to end.

The end point (B) of A-B Repeat playback is registered, and the A-B region will play back repeatedly.

MEMO

- **Icon indication**

  The A-B Repeat icon is displayed during A-B Repeat playback.



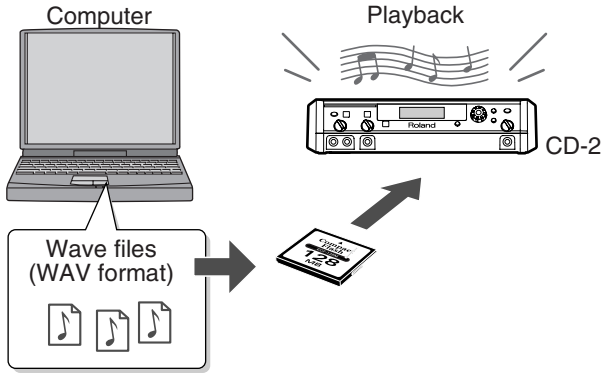
- **Canceling A-B Repeat**

  During A-B Repeat playback, press [A-B]; the A-B Repeat function is cancelled, and you are returned to normal playback.

  If you press ■ on the CF side, A-B Repeat will be cancelled, and the CF card playback will stop.

You can also play back wave files (WAV format) that have been written to the CF card using a computer

Wave files (WAV format) written to the CF card using a computer can also be played back.



■ **Wave files (WAV format) that can be played**

The CD-2 can play wave files that meet the following conditions.

16-bit linear/44.1 kHz/stereo/
filename extension ".WAV" (.wav)/
Four seconds or longer (approximately 690 KB or more)

■ **Write-destination directory**

Write the wave file to the "root directory" of the CF card.

NOTE

- We cannot guarantee that the CD-2 will operate correctly if you manipulate any directories or files that are not related to wave files.

■ **CF cards that contain recorded data**

If you write wave files to a CF card that is being used by the CD-2 (i.e., a CF card that already contains recorded data), the files will be added following the last track in alphabetical order of their title.

* File names become track titles.

Creating a Music CD from a CF Card

Here's how you can create a music CD by writing tracks from a CF card to a CD-R/RW disc.

NOTE

- We cannot guarantee that music CDs created by the CD-2 will play back on all CD players. Depending on its support for CD-R/RW discs, your CD player may be unable to play them correctly.

MEMO

- Two seconds of silence are automatically inserted between tracks on the CD-R/RW disc when you create a music CD.

HINT

- By using a mastering effect (Page 49) you can eliminate inconsistencies in the volume across the various frequency ranges, making the CD more professional sounding.

  If you want to use a mastering effect to create a music CD, choose the type of mastering effect before you continue. Page 49, "Creating a Professional-Sounding CD"

1 Insert the CF card.

Page 27, "Inserting a CF Card"

2 Press TRACK SELECT.

The "Insert Disc" message appears and the disc tray opens.

```
TRACK SELECT
Insert Disc
```

3 Insert a blank or appendable CD-R/RW disc.

Page 26, "Inserting a Disc"

When the CD-2 recognizes the CD-R/RW disc, the following screen appears.

```
CF01 SNG01_00
          →CD01
```

4 Turn DATA to select the track that you want to write.

- You can also press ⏮ or ⏭ to select the track.

```
CF01 SNG01_00
          →CD01
```

(CF card track number and title; CD track number)

- If you want to audition the selected track, press ▶/II on the CF card side. To stop playback, press ■ on the CF card side.

5 Press TRACK SELECT.

The track you selected in Step 4 is selected as the track to be written.

If there are other CF card tracks that you would like to write to the CD, repeat Steps 4–5.

6 When you've selected all of the tracks that you want to write to the CD, press WRITE.

The message "CD WRITE. Are You Sure?" appears.

```
CD WRITE
Are You Sure?
```

7 To write the tracks to disc, press ENTER.

(If you decide to cancel, press EXIT.)

The FINALIZE screen appears.

```
FINALIZE
          :Yes
```

8 Choose whether you want to finalize the disc.

Finalization is a process that makes the newly written CD-R/RW disc playable in a conventional CD player.

- The CD-2 is able to play back unfinalized CD-R/RW discs.

Yes	When writing is finished, the disc will be finalized to complete the music CD. No further data can be written to a CD-R/RW disc that has been finalized, even if space remains on the disc. However, if you're using a CD-RW disc, you can remove the finalization and add additional material. ⇨ Page 65, "Removing Finalization"
No	The disc will not be finalized when writing is finished. After the tracks have been written, you will still be able to add more tracks if space remains on the disc. You can also perform the finalization step later to complete the music CD. ⇨ Page 50, "Make a Disc Playable in a Conventional CD Player"

9 If "Yes" is selected in Step 8

① Press ENTER .

(If you decide to cancel writing, press EXIT .)

The message "FINALIZE. Are You Sure?" appears.

```
FINALIZE
Are You Sure?
```

② To write the tracks to disc, press ENTER .

(If you want to return to Step 8, press EXIT .)

Writing to the CD-R/RW disc begins. After the tracks are written, the disc will be finalized.

When writing has been successfully completed, the CD-R/RW disc is ejected and the message "Write Completed. Another Disc?" appears.

```
Write Completed
Another Disc?
```

If "No" is selected in Step 8

① Press ENTER .

(If you decide to cancel writing, press EXIT .)

Writing to the CD-R/RW disc begins.

When writing has been successfully completed, the CD-R/RW disc is ejected and the message "Write Completed. Another Disc?" appears.

```
Write Completed
Another Disc?
```

10 If you want to write the same tracks to another CD-R/RW disc, press ENTER .

The "Insert Disc" message appears.

```
CD WRITE
Insert Disc
```

Insert another blank or appendable CD-R/RW disc, close the disc tray, and the "CD WRITE. Are You Sure?" message appears.

Return to Step 7 and continue the procedure.

If you are finished with writing, press EXIT .

You're returned to the screen from which you started.

Play back the CD-R/RW disc you just wrote (⇨ Page 40) to verify that it was written correctly.

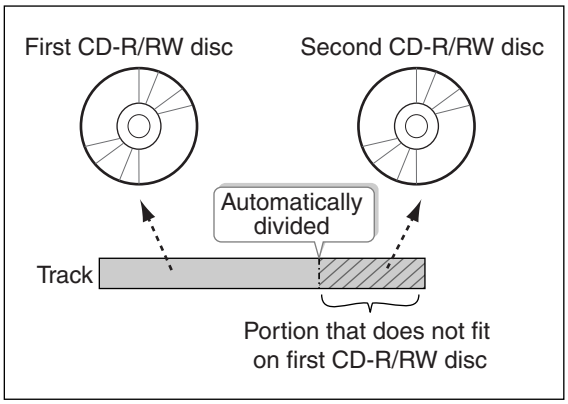
- **What to do if a track is larger than the capacity of a CD-R/RW disc**
- **Creating a music CD using tracks from more than one CF card**

See the next page. ▶▶▶

What to do if a track is larger than the capacity of a CD-R/RW disc

Even if a track is larger than can be written to a single CD-R/RW disc, it can automatically be divided across multiple CD-R/RW discs for writing.

If you want to automatically divide and write a large track, proceed as follows.



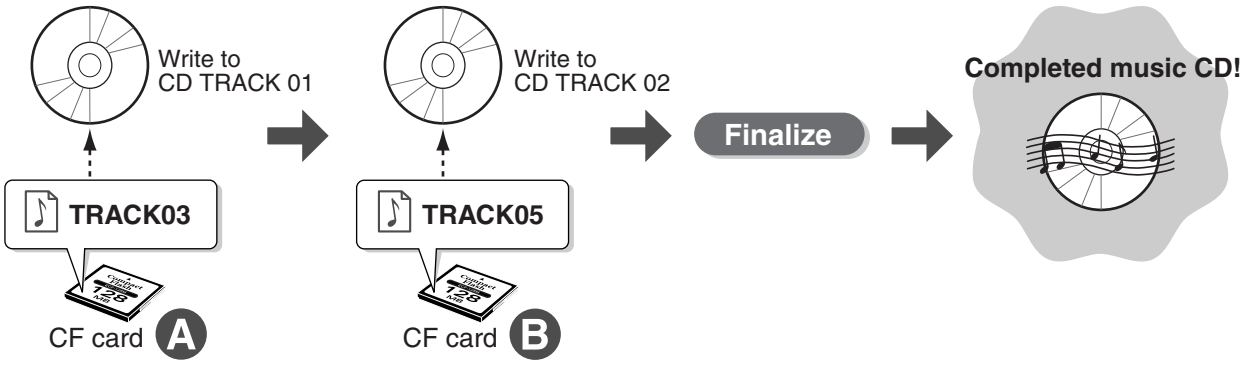
- In Steps 4–5 on Page 46, specify the large track as the first track to be written. A track can be written across multiple discs only if the first track specified for writing is larger than can be written to a single CD-R/RW disc.
  - If you specify a large-size track, you will not be able to specify more than one track for writing.
- After the first CD-R/RW disc has been ejected, the message "Insert Disc" will appear. Insert another CD-R/RW disc. When the disc is detected, writing will begin automatically.

  Continue inserting additional CD-R/RW discs as directed by the messages that appear.

  When all the data has been written, the message "Write Completed. Another Disc?" will appear. Continue with the procedure from Step 10 of Page 47.
  - CD-R/RW discs that have no more space on them after the track has been written will be finalized automatically. For example, if a track is divided across two discs, as in the example shown in the illustration at the upper right, the first CD-R/RW disc will be finalized automatically.

Creating a music CD using tracks from more than one CF card

If the CD-R/RW disc has not been finalized, you can add tracks from another CF card. If you want to create a music CD using tracks from more than one CF card, simply keep adding tracks to a CD-R/RW disc and finalize the disc when you're finished.



Creating a Professional-Sounding CD (Mastering Effects)

When creating a music CD from tracks on a CF card, you can apply a mastering effect to eliminate inconsistencies in the volume across the various frequency ranges, making the music CD more professional sounding.

You can choose one of 25 different Mastering Effect patches. Choose the patch that is most suitable for the music CD you want to create.

MEMO

- You can't use a Mastering Effect at the same time as the other effects (⇨ Page 70).

1 Press MASTERING.

The Mastering Effect screen appears.

- If an effect (⇨ Page 70) is on, the "Use MASTERING? FX will be Off" message appears.

  Press the [ENTER] button to turn off the effect; the mastering patch screen appears.

2 Turn DATA to select a Mastering Effect patch.

- For a list of patches, refer to the table on the right.
- If you choose a selection other than "Off," the Mastering Effects will be on, and [MASTERING] will light.
- After selecting a Mastering Effect patch, you can play back the CF card to audition the sound of the chosen patch.

Proceed to Step 2 on Page 46 to write a CD with Mastering Effects applied.

MEMO

- If you're using Mastering Effects, it will take longer to write the tracks.

  The writing time will be approximately 1.5 times the length of the tracks.
- When the tracks have been written, Mastering Effects will automatically be turned "Off."
- If you don't want to use Mastering Effects, choose "Off" in Step 2. Alternatively, press the [MASTERING] button once again.When MASTERING Effects are "Off," [MASTERING] is unlit.

■ Mastering Effect Patch List

Patch Name	Function
Mixdown	Basic mixdown for CD.
Live Mixing	Final mix of live recording.
Narration	Mix for video or radio narration.
Jam Session	Use for recording a practice or jam session in loud rehearsal room.
OutDoors	Controls background noise of recordings made outdoors.
Rock Band	Use for pop or rock bands.
Low Boost	Enhances the low frequency range of drums and bass.
Brighten	Adds crispness and sizzle to the overall mix.
Piano	Use to control the dynamic range of acoustic pianos.
Choir	Use for vocal ensembles.
Brass	Use for brass ensembles.
Woodwind	Use for woodwind ensembles.
Orchestra	Level control and air for live recordings of bands or orchestras.
Acoustic	Adds clarity and warmth to strummed or plucked acoustic instruments.
Mix CD	Use when compiling tracks from different sources for uniform levels.
CMP+FAT EQ	Maximized sound level and tonal character suitable for dance music.
LO&SLOW FLNG	Slow modulation effect.
ST CHORUS	Deep and spacious sound produced by a chorus effect.
PS:DETUNE	Pitch-shifted sound added to create depth.
ST DOUBLER	Doubling applied to produce a spacious sound.
CHORUS+DELAY	Chorus and delay combined to enhance the spatial spread.
1920's RADIO	Simulates the sound of an antique radio that's not tuned correctly.
1960's RADIO	Simulates the sound of a noisy old radio.
VINTAGE 45's	Simulates the sound of a 45 RPM single played on an antique phonograph.
CLASSIC LP	Simulates the sound of an LP played on a turntable.

Make a Disc Playable in a Conventional CD Player (Finalize)

In order for a CD-R/RW disc you've recorded on the CD-2 to be playable in a conventional CD player, you must "finalize" the disc.

A finalized CD-R disc or CD-RW disc can be played back as a music CD in a CD player that supports CD-R or CD-RW playback, respectively.

	CD player that supports CD-R (CD-RW) playback	The CD-2
Finalized disc	Playable	Playable
Unfinalized disc	**Not** playable	Playable

NOTE

- We cannot guarantee that music CDs created by the CD-2 will play back on all CD players. Depending on its degree of support for CD-R/RW discs, your CD player may be unable to play them correctly.

MEMO

- No more data can be written/recorded to a CD-R/RW disc that has been finalized, even though there may be space remaining on the disc.

  However, in the case of a CD-RW disc, you can remove the finalization and add/record additional material.

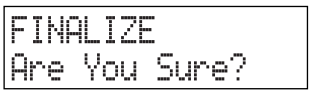
  Page 65, "Removing Finalization"

1 Insert the CD-R/RW disc that you want to finalize.

Page 26, "Inserting a Disc"

2 Press FINALIZE .

The "Are You Sure?" message appears.



3 To finalize the disc, press ENTER .

(If you decide to cancel, press EXIT .)

The disc is finalized. During this process, a timer is displayed, counting-down the time until finalization is completed.

When finalization is completed, the CD-R/RW disc is ejected. Your music CD is now ready.

Advanced Operation

This section explains the more advanced functions of the CD-2.

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Using the Metronome

You can sound a metronome—a convenient feature for practicing your instrument.

MEMO

- The metronome cannot be used while overdubbing a performance with a music CD (Page 32).

1 Press METRONOME.

The metronome is turned on, and the [METRONOME] button blinks.

2 Setting the sound.

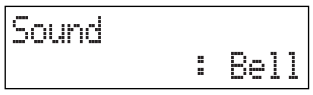
① Press MENU.

"[METRONOME] Sound" appears in the display.

- If [MENU] is pressed while the metronome is turned on, the screen to select the metronome sound ("Sound") will appear instead.

② Press ENTER.

The following screen appears.



③ Turn DATA to select the metronome sound.

Click: An electronic tone will be heard.

Bell: A bell will be heard.

Off: The metronome sound is turned off (the [METRONOME] button will continue to blink).

④ Press EXIT.

You're returned to the previous readout.

3 Setting the tempo.

① Press MENU until "Tempo" appears in the display, and then press ENTER.

- You can also select this item by turning [DATA].

The following screen appears.

② Turn DATA to set the metronome's tempo.

- You can adjust the metronome's tempo in a range of ♩=20–250 (the number of quarter notes in one minute).

③ Press EXIT.

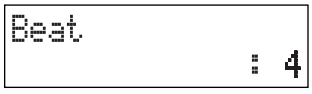
You're returned to the previous readout.

4 Specifying which beats are emphasized.

① Press MENU until "Beat" appears in the display, and then press ENTER.

- You can also select this item by turning [DATA].

The following screen appears.



② Turn DATA to choose which metronome beats are emphasized.

- A quarter-note will be counted as one beat.

0: No beats are emphasized.
1: Every beat is emphasized.
2: Every second beat is emphasized.
3: Every third beat is emphasized.
4: Every fourth beat is emphasized.
5: Every fifth beat is emphasized.
6: Every sixth beat is emphasized.
7: Every seventh beat is emphasized.
: Each beat is divided into a triplet, and an emphasized beat will sound at the beginning of each triplet.
: Each beat is divided into sixteenth notes, and an emphasized beat will sound on the sixteenth note at the beginning of each beat.

5 Press EXIT twice.

You're returned to the previous readout.

6 To stop the metronome, press again.

METRONOME

The metronome is turned off, and the [METRONOME] button becomes unlit.

MEMO

- **How the [METRONOME] button indicates the tempo and emphasized beats**

  When the metronome is on, the [METRONOME] button will blink in time with the beat. Red indicates the emphasized beats, and green indicates the un-emphasized beats.

■ When recording with the metronome

If you're recording from the internal mics (when [MIC SELECT] is lit green: Page 30), the metronome will not be heard from the internal speakers in recording-standby mode or during recording. You'll need to use headphones in order to hear the metronome.

Sounding a Count-In to Ensure Accurate Timing (Count-in)

You can sound a count-in before recording begins.
This provides a timing reference for your recorded performance.

MEMO

- If you're recording from the internal mics (when [MIC SELECT] is lit green: Page 30), the count-in will not be heard from the internal speakers. You'll need to use headphones in order to hear the count-in.

6 Following Step 5 on left column...

Press MENU until "Count-in (Beat)" appears in the display, and then press ENTER.

- You can also select this item by turning [DATA].

The following screen appears.

```
Count-in (Beat)
                :Off
```

7 Turn DATA to specify the number of beats that will be counted before recording begins.

Off: No count-in will sound.
1–16: The specified number of count-in beats will sound.

8 Press EXIT twice.

You're returned to the previous readout.

- If you want to disable the count-in, choose "Off" in Step 7.

Automatically Starting Recording When Sound Begins

You can have the CD-2 start recording when it detects sound that is louder than a specified level.

If you start recording the usual way, by pressing a button, a length of silence will be recorded until you begin playing your instrument. However, if you use the CD-2's Auto Rec Start function, recording will start automatically in response to your voice or instrument, letting you record without creating a length of silence at the beginning of the track.

HINT

- If you record on a CF card, you can delete unwanted silence at the beginning of the track after you're finished recording (⇨ Page 60).

MEMO

- The Auto Rec Start function will not operate if you've enabled a count-in (⇨ Page 53). You must turn the count-in "Off."

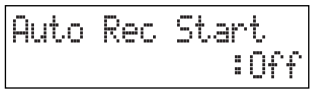
1 Make preparations for recording.

- If you're recording with the internal mics ⇨ Page 30, Steps1–2
- If you're recording from a connected mic or instrument ⇨ Page 31, Steps 1–3

2 Press MENU until "Auto Rec Start" appears in the display, and then press ENTER.

- You can also select this item by turning [DATA].

The following screen appears.



3 Turn DATA to specify the level at which recording is to start automatically.

Off: Recording will be started manually.

-48 dB – -6 dB: This is the minimum level at which recording will start. For example if you choose "-6 dB," recording will start as soon as the CD-2 detects any sound louder than -6 dB.

4 Press EXIT twice.

You're returned to the previous readout.

This completes preparations for automatically starting recording.

5 Press MARKER.

- Press the button that controls the media (CF card or CD) to which you're recording.

6 Press ▶/II.

- Press the button that controls the media (CF card or CD) to which you're recording.

The message "Waiting Signal.." appears, and the CD-2 enters recording-standby mode.

7 Begin playing your instrument.

When the CD-2 detects sound at a level higher than the level you specified in Step 3, recording will start automatically.

8 When you're finished recording, press ■.

- Press the button that controls the media (CF card or CD) to which you're recording.

A new track is created at the end of the CF card or CD-R/RW disc.

MEMO

- You can press ▶/II to pause recording.

  Recording will begin automatically the next time the CD-2 detects sound at a level higher than the level you specified in Step 3.

  If you pause recording, a new track will be created at the point you resume recording.

Assigning Tracks Numbers While You Record

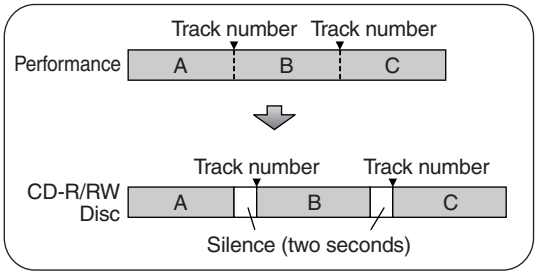
You can assign a track number while recording, so that subsequently recorded material will be on a new track.

MEMO

- You can't delete a track number once it's been assigned.
- You can assign track numbers only during recording.
- The track numbers can be assigned no closer than four seconds apart. You can't assign a new track number less than four seconds after assigning the previous track number.
- You can assign up to 99 track numbers (99 tracks) in one CF card or CD-R disc. In case of a CD-RW disc, you can assign up to 98 track numbers (98 tracks).

● When you assign track numbers to a CD-R/RW disc

- When you assign a track number, two seconds of silence is automatically inserted in front of the new track number.



- You can't assign another track number while the following message is displayed. However, recording will continue.

This message indicates that the track number is being written to the CD-R/RW disc.

HINT

- Tracks recorded on a CF card can be split afterward as desired. Page 62, "Dividing a track"

Using [MARKER] to assign track numbers

If several songs are being recorded in succession, such as during a live performance, you can assign a track number to each song while you continue recording.

1 **At the point where you want to assign a track number during recording, press**

.

- Press the button that controls the media (CF card or CD) to which you're recording.

The track number is incremented, and the material that follows will be recorded as on that track.

HINT

- You can also use a foot switch to assign track numbers. In Step 2 of "Specifying the Function of the Foot Switch" on Page 76, choose "Marker," and then press the foot switch at the appropriate moment during recording.

Assigning Track Numbers at Specified Intervals

When making a long recording such as a lecture, you can automatically assign track numbers at fixed time intervals to divide the recording into tracks. If you've assigned track numbers, it will be easier to find a desired location in the recording.

1 Press MENU until "Auto Marker" appears in the display, and then press ENTER.

- You can also select this item by turning [DATA].

The following screen appears.

```
Auto Marker
          : Time
```

2 Turn DATA to select "Time."

Off: Track numbers will be assigned at the points where you press MARKER while recording.

Time: During recording, track numbers will be assigned at every specified time interval.

Level: During recording, track numbers will be assigned when the sound drops below a specified level.

3 Press EXIT.

You're returned to the previous readout.

4 Press MENU until "Auto Marker Time" appears in the display, and then press ENTER.

- You can also select this item by turning [DATA].

The following screen appears.

```
Auto Marker Time
          : 5min
```

5 Turn DATA to specify the time interval at which track numbers are to be assigned.

- You can specify a time interval of 5 min–15 min (minutes).

6 Press EXIT twice.

You're returned to the previous readout.

Subsequently, when you begin recording, track numbers will automatically be assigned at every time interval you've specified in Step 3.

- To defeat this setting, choose "Off" in Step 2.

Assigning Track Numbers When Silence is Detected

You can have track numbers automatically assigned whenever the CD-2 detects a region of silence (longer than one second) during recording.

1 Press MENU until "Auto Marker" appears in the display, and then press ENTER.

- You can also select this item by turning [DATA].

The following screen appears.

```
Auto Marker
          :Level
```

2 Turn DATA to select "Level."

Off: Track numbers will be assigned at the points where you press MARKER while recording.

Time: During recording, track numbers will be assigned at every specified time interval.

Level: During recording, track numbers will be assigned when the sound drops below a specified level.

3 Press EXIT.

You're returned to the previous readout.

4 Press MENU until "Auto Marker Lvl" appears in the display, and then press ENTER.

- You can also select this item by turning [DATA].

The following screen appears.

```
Auto Marker Lvl
          :-30dB
```

5 Turn DATA to specify the level that will be considered as silence.

- You can specify the level in a range of -60 dB– -30 dB.

6 Press EXIT twice.

You're returned to the previous readout.

Subsequently, when you begin recording, the CD-2 will automatically assign a track number when it detects a period of silence; i.e., a period with a level that is below the level you specified in Step 3, and that is at least one second in length.

- To defeat this setting, choose "Off" in Step 2.

Editing a CF Card

Eight editing operations such as Delete or Rename are provided so songs recorded on a CF card can be edited.

Preparations common to all CF card editing operations

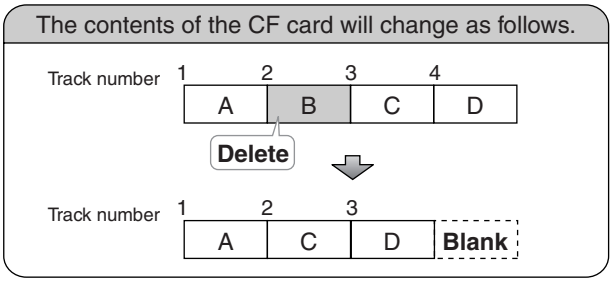
❶ Insert the CF card that you want to edit.

❷ Press the CF card button to select the CF card as the source.

⚠ NOTE

- You can't recover a track that you've erased. Use caution before erasing a track.

Erasing a Track



1 Use ◀◀ or ▶▶ to select the track you want to erase.

2 Press EDIT until "ERASE 1 TRACK" appears in the display.

```
CF EDIT(1/8):
ERASE 1 TRACK
```

3 Press ENTER.

The "Are You Sure?" message appears.

```
ERASE TRACK02
Are You Sure?
```

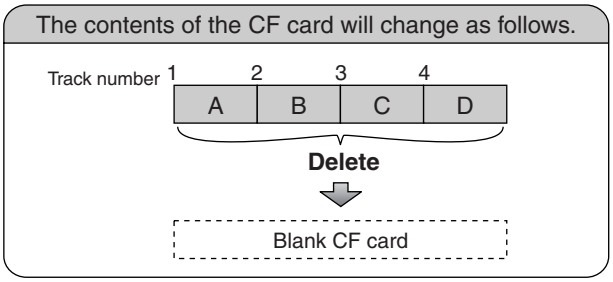
Number of the track you're erasing

4 To erase the track, press ENTER.

(If you decide to cancel, press EXIT.)

The track will be erased, and then you're returned to the original readout.

Erasing All Tracks



1 Press EDIT until "ERASE ALL TRACKS" appears in the display.

```
CF EDIT(2/8):
ERASE ALL TRACKS
```

2 Press ENTER.

The "Are You Sure?" message appears.

```
ERASE ALL TRACKS
Are You Sure?
```

3 Press ENTER.

The "Really Sure?" message appears.

```
ERASE ALL TRACKS
Really Sure?
```

4 To erase all tracks, press ENTER.

(If you decide to cancel, press EXIT.)

All tracks will be erased, and then you're returned to the original readout.

Assigning a Title to a Track

You can assign a title of up to 250 characters to each track on a CF card.

MEMO

- Track titles such as "SNG01_00 ➔ SNG02_00 ➔... SNG99_00" are automatically assigned to each track.

  SNG01_00

  Track number assigned when recording.

  If there are two or more tracks with the same title, a two-digit number is appended to distinguish them.

- **Track title display**

  You can show the track titles in the screen. If you've switched the title display setting "On," the title will appear on screen when you switch tracks. Few seconds later, the screen returns to the time display. Page 78, "Viewing the Track Titles on a CF Card"

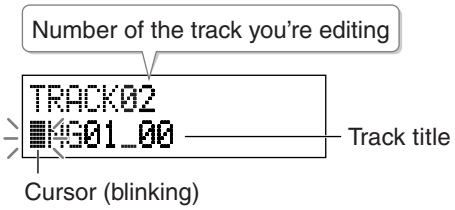
1 **Use ◀◀ or ▶▶ to select the track to which you want to assign a title.**

2 **Press EDIT until "RENAME" appears in the display.**

```
CF EDIT(3/8):
RENAME
```

3 **Press ENTER.**

The title entry screen appears.



4 **Enter the title.** See "Entering characters" in the next column.

5 **To confirm the title you've entered, press ENTER.**

(If you decide to cancel, press EXIT.)

The title you specified is assigned to the track, and then you're returned to the original readout.

■ Entering characters

Characters are entered at the location of the cursor. Move the cursor and enter the desired characters.

To move the cursor	**Press ◀◀ or ▶▶** The cursor will move backward or forward.
To choose a character	**Turn** DATA
To insert a space	**Press** 1/ALL A space (blank) is inserted at the cursor. Choose the desired character.
To delete a character	**Press** A-B The character at the cursor is deleted. Subsequent characters will move forward.

- You can enter the following characters.

```
A B C D E F G H I J K L M N O P Q R S T U V
W X Y Z [ ] ^ _ ` a b c d e f g h i j k l m
n o p q r s t u v w x y z { }   ! # $ % & '
( ) + , - . 0 1 2 3 4 5 6 7 8 9 ; = @
```

  As you turn [DATA] clockwise, the characters will appear in the order of A ➔ B ➔... Z ➔ [➔...

  Turning [DATA] counterclockwise will cause the characters to appear in the opposite order.

* A blank space or a "." (period) cannot be used as the first character of a title. If you try to do so, the CD-2 will delete the first character automatically and use the subsequent characters for the track title.

■ If you rename the file on your computer

The tracks are stored in the root directory of the CF card. The files with an extension of ".WAV" and ".DAT" are the track files.

The CD-2 uses the filename as the track name. You can change the title by renaming the file. This will change the order of the tracks on the CF card. Tracks you rename will move to a location following the last track.

⚠ NOTE

- **You must not change the filename extension of ".WAV" or ".DAT".**
- **We cannot guarantee that the CD-2 will operate correctly if you manipulate any directories or files with extensions other than ".WAV" or ".DAT".**
- Don't use double-byte characters (e.g., Japanese) or "~" (tilde) in the filename; the CD-2 is unable to recognize them.
- The filename must be 250 characters or fewer (not including the filename extension).

Preparations common to all CF card editing operations

1. **Insert the CF card that you want to edit.**
2. **Press the CF card button to select the CF card as the source.**

Trimming Silent Regions at the Beginning and End of a Track (Trim In/Out)

When recording an instrumental or vocal performance, you might start recording somewhat earlier than the actual beginning of the performance and stop recording somewhat later than the actual end, so as not to lose any of the performance.

In such cases, there may be an unwanted silence at the beginning or end of the track.

The CD-2 lets you trim such silences from the beginning or end of the track, so that the sound will begin the moment you start playing the track.

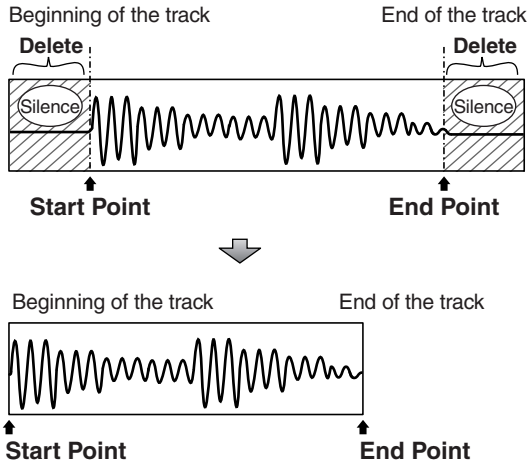
MEMO

- If the CF card does not have enough remaining free space, you won't be able to execute the Trim In/Out operation.

Start Point and End Point

If you want to trim silent regions from the beginning or end of a track, you must first specify the desired Start Point and End Point. The silent regions will be trimmed as shown below, according to the Start Point and End Point you specify.

- **Start Point:** The location at which the sound begins.
- **End Point:** The location at which the sound ends.



MEMO

- You can't specify Start Point and End Point locations that would cause the edited song to be less than four seconds long.

Trimming Silence from the Beginning of a Track

1 Use or to select the track you want to edit.

2 Press EDIT until "TRIM IN" appears in the display.

3 Press ENTER.

The trim in editing screen appears.

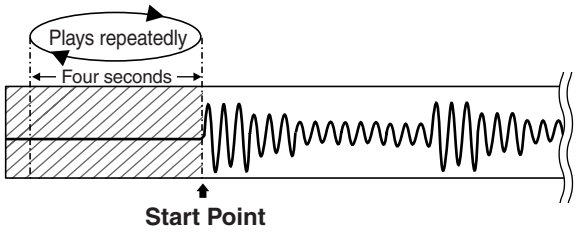
Number of the track you're editing

4 On the CF card side, press ►/II.

The track will begin playing.

5 At the desired Start Point, press MARKER on the CF card side.

Four seconds of sound preceding the Start Point will play repeatedly.



6 Turn DATA to precisely adjust the Start Point.

- Turn [DATA] clockwise/counterclockwise to move the Start Point forward or backward in small steps.
- Slowly turn [DATA] to adjust the Start Point so that you don't hear the beginning of the sound.

7 Press ENTER.

The message "Are You Sure?" appears.

```
TRIM IN
Are You Sure?
```

8 To execute the Trim In operation, press ENTER.

(If you decide to cancel, press EXIT.)

The Trim In operation will be carried out. Once it's complete, you're returned to the original readout.

Trimming Silence from the End of a Track

1 Use ◀◀ or ▶▶ to select the track you want to edit.

2 Press EDIT until "TRIM OUT" appears in the display.

```
CF EDIT(5/8):
TRIM OUT
```

3 Press ENTER.

The trim out editing screen appears.

```
TRIM OUT
   10  00:00
```

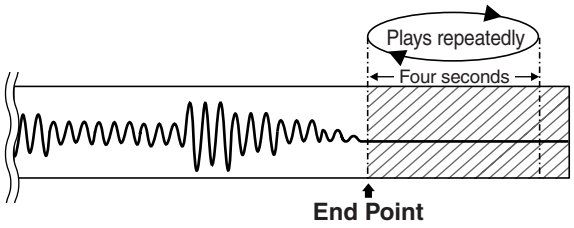
Number of the track you're editing

4 On the CF card side, press ▶/II.

The track begins playing.

5 At the desired End Point, press MARKER on the CF card side.

Four seconds of sound following the End Point will play repeatedly.



6 Turn DATA to precisely adjust the End Point.

- Turn [DATA] clockwise/counterclockwise to move the End Point forward or backward in small steps.
- Slowly turn [DATA] to adjust the End Point so that you don't hear the end of the sound.

7 Press ENTER.

The message "Are You Sure?" appears.

```
TRIM OUT
Are You Sure?
```

8 To execute the Trim Out operation, press ENTER.

(If you decide to cancel, press EXIT.)

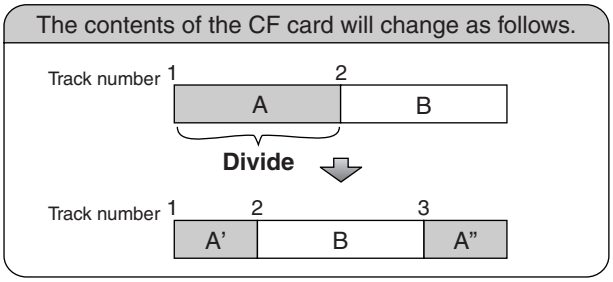
The Trim Out operation will be executed. When it has been completed, you're returned to the original readout.

Preparations common to all CF card editing operations

❶ **Insert the CF card that you want to edit.**

❷ **Press the CF card button to select the CF card as the source.**

Dividing a Track (Divide)

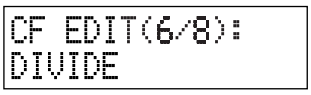


MEMO

- Tracks that follow the location of the division will be placed at the end of the CF card.
- If the CF card does not have enough remaining free space, you won't be able to execute the Divide operation.
- You can't edit a track that is shorter than eight seconds.

1 Use ◀◀ or ▶▶ to select the track you want to divide.

2 Press EDIT until "DIVIDE" appears in the display.



3 Press ENTER.

The divide editing screen appears.

Number of the track you're editing

4 On the CF card side, press ▶/II.

The track will begin playing.

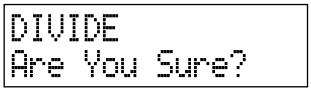
5 Press MARKER at the approximate location where you want to divide the track.

Four seconds of sound preceding this location will play repeatedly.

6 Turn DATA to adjust the precise location at which you want to divide the track.

7 Press ENTER.

The message "Are You Sure?" appears.



8 To divide the track, press ENTER.

(If you decide to cancel, press EXIT.)

The track will be divided. When the operation is completed, you're returned to the original readout.

The new track is created at the end of the CF card. Play back the last track (⇨ Page 44) to hear the result.

Converting a Track to a Wave File (Wave Convert)

Tracks that were recorded with a recording mode (⇨ Page 36) of "Standard" or "Long" can be converted into a wave file (WAV format) that can be handled by your computer or other device.

MEMO

- The new track produced by this conversion is placed at the end of the CF card.
- If the CF card does not have enough remaining free space, you won't be able to execute the Wave Convert operation.

1 Use ◀◀ or ▶▶ to select the track that you want to convert into a wave file.

2 Press EDIT until "WAVE CONVERT" appears in the display.

```
CF EDIT(7/8):
WAVE CONVERT
```

3 Press ENTER.

The message "Wave Convert?" appears.

Track number of the source

```
Tr02 → Tr10
Wave Convert?
```

Track number of the conversion result

- The message "Already WAV Trk" will appear if the track you selected in Step 1 was recorded with a recording mode of "WAV," and you will be returned to the original readout. Select a different track.

4 To execute the conversion, press ENTER.

(If you decide to cancel, press EXIT.)

The track is converted to a wave file. When the conversion is finished, you're returned to the original readout.

Formatting a CF Card

If you turn off the power or subject the CF card to a strong physical shock while the CD-2 is operating, the data in the CF card may be damaged, and the system may stop operating correctly.

If this occurs, re-format the CF card.

NOTE

- **Never turn off the power or remove the CF card while formatting is being carried out.** Doing so may destroy the data on the CF card or render the CF card unusable.
- Formatting a CF card erases all data currently residing on the card.

1 Press EDIT until "FORMAT CF CARD" appears in the display.

```
CF EDIT(8/8):
FORMAT CF CARD
```

2 Press ENTER.

The message "Are You Sure?" appears.

```
FORMAT CF CARD
Are You Sure?
```

3 Press ENTER.

The message "You'll Lose Data. Really Sure?" appears.

```
You'll Lose Data
Really Sure?
```

4 To format the card, press ENTER.

(If you decide to cancel, press EXIT.)

Formatting begins. Once the formatting has been successfully completed, the following screen appears.

```
L
R
00  00:00
```

Erasing Tracks from a CD-RW Disc

If you're using a CD-RW disc, you can erase previously recorded tracks.

- You can't erase tracks from a CD-R disc.

Preparations common to all CD-RW editing operations **Insert the CD-RW disc from which you want to erase tracks.**

NOTE

- You can't recover a track that's been erased. Use caution before executing these operations.

Erasing the Last Track

Here's how to erase the last track recorded on the CD-RW disc.

MEMO

- If you want to erase a track from a CD-RW disc that's been finalized (Page 50), you'll need to first remove finalization (Page 65).

1 **Press ERASE until "ERASE LAST TRACK" appears in the display.**

```
ERASE(1/3):
ERASE LAST TRACK
```

2 **Press ENTER.**

The "Are You Sure?" message appears.

```
ERASE LAST TRACK
Are You Sure?
```

3 **To erase the last track, press ENTER.**

(If you decide to cancel, press EXIT.)

The track is erased. During this process, a timer is displayed, counting-down the time until the operation is completed.

```
ERASE LAST TRACK
Processing..1:12
```

Counting-down

When the track has been erased, you're returned to the original readout.

Erasing All Tracks

Here's how to erase all tracks from the CD-RW disc.

MEMO

- If the CD-R/RW disc has been finalized (Page 50), finalization will automatically be removed when you erase all tracks.

1 **Press ERASE until "ERASE ALL TRACKS" appears in the display.**

```
ERASE(2/3):
ERASE ALL TRACKS
```

2 **Press ENTER.**

The "Are You Sure?" message appears.

```
ERASE ALL TRACKS
Are You Sure?
```

3 **Press ENTER.**

The "Really Sure?" message appears.

```
ERASE ALL TRACKS
Really Sure?
```

4 **To erase all tracks, press ENTER.**

(If you decide to cancel, press EXIT.)

The tracks will be erased. During this process, a timer is displayed, counting-down the time until the operation is completed.

```
ERASE ALL TRACKS
Processing..6:58
```

Counting-down

When all tracks have been erased, you're returned to the original readout.

Removing Finalization

You can remove finalization from a CD-RW disc (Page 50) so that the disc can once again be used for recording.

MEMO

- You can't remove finalization from a CD-R disc.
- Removing finalization will not erase the recorded tracks.

1 Press ERASE until "UNFINALIZE" appears in the display.

```
ERASE(3/3):
UNFINALIZE
```

2 Press ENTER.

The message "Are You Sure?" appears.

```
UNFINALIZE
Are You Sure?
```

3 To remove finalization, press ENTER.

(If you decide to cancel, press EXIT.)

Finalization is removed from the disc. During this process, a timer is displayed, counting-down the time until the operation is completed.

```
UNFINALIZE
Processing..1:12
```

Counting-down

When finalization has been removed, you're returned to the original readout.

Tuning Your Instrument (Tuner)

You can use the CD-2's chromatic tuner function to tune your instrument.
The tuner function can be used with any of the CD-2's inputs, including the internal mics.

MEMO

- You can't play back or record while using the tuner.
- The effect (Page 70) is not applied while you're using the tuner.
- If you don't want to hear the sound while using the tuner, you can turn down the [OUTPUT LEVEL] knob (Page 25) or press [SPEAKER MUTE] to mute the sound (Page 25).

Example Tuning your electric guitar.

Preparations

1. Connect your guitar to the GUITAR jack.
2. Repeatedly press [MIC SELECT] until it is **lit orange**. Page 36

1 Press TUNER until "TUNER" appears in the display.

2 Play a single note on the open string you want to tune.

The screen will show the name of the closest note to the pitch you played.

- You must cleanly play a single note on only the string you want to tune.

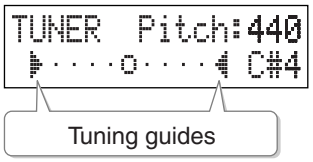
3 Tune the string so that the correct note name for that string appears in the screen.

- Conventional tuning

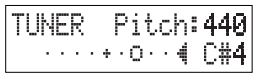
	6th string	5th string	4th string	3rd string	2nd string	1st string
Guitar	E	A	D	G	B	E
Bass			E	A	D	G

4 Tune the string so that the left and right tuning guides are both displayed.

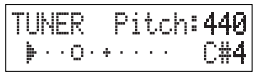
If the string is tuned within +/-50 cents of the correct pitch, tuning guides are displayed in the screen, indicating the distance between the actual pitch and the displayed note name.



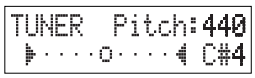
When only the right guide is displayed:
The pitch is above the displayed note name (i.e., sharp).



When only the left guide is displayed:
The pitch is below the displayed note name (i.e., flat).



When both the right and left guides are displayed:
The pitch matches the displayed note name.



5 Repeat Steps 2–4 to tune each of your instrument's strings.

MEMO

- If you're tuning a guitar that has a vibrato tailpiece, tuning one string may cause other strings to drift out of tune.

  If so, start by tuning each string to the approximate pitch, and then continue tuning each string in turn until they are all at the correct pitch.

6 When you're finished using the tuner, press EXIT.

You're returned to the previous readout.

Changing the Tuner's Reference Pitch

You can calibrate the CD-2's Tuner to another instrument or tuning standard by adjusting its "reference pitch."

The reference pitch is the frequency of the A4 note. For example, this is the pitch of the middle A note on a piano.

1 Press TUNER until "TUNER" appears in the display.

2 Turn DATA to change the reference pitch.

- You can adjust this in a range of 435–445 Hz.

3 When you're finished adjusting the reference pitch, press EXIT.

You're returned to the previous readout.

Listening to a Guide Tone While Tuning

As a tuning aid, you can have the CD-2 sound a guide tone from the internal speakers.

1 Press TUNER until "Tone" appears in the display.

You will hear the guide tone shown in the screen.

2 Turn DATA to select the guide tone you want to hear.

- You can choose one of 25 chromatic notes in the range A3–A5.

3 Tune your instrument to the guide tone.

4 To stop the guide tone, press EXIT.

You're returned to the previous readout.

MEMO

- The reference pitch for the guide tone can be adjusted in the Tuner screen (Page 67).

Copying an Original Music CD

You can use the CD-2 to copy a CD containing your original music.

Copyright

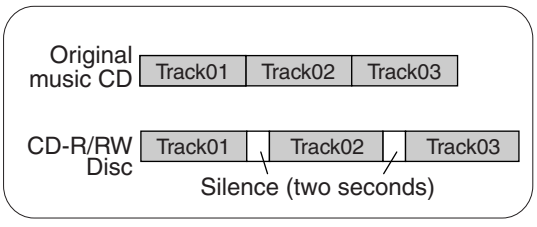
- Unauthorized recording, distribution, sale, lending, public performance, broadcasting, or the like, in whole or in part, of a work (musical composition, video, broadcast, public performance, or the like) whose copyright is held by a third party is prohibited by law.
- This unit is designed for professional use. When using the CD-R/RW drive to transfer audio signals, this unit can perform recording without being subject to the restrictions of the Serial Copy Management System (SCMS). This is because the unit is intended solely for musical production, and is designed not to be subject to restrictions as long as it is used to record works (such as your own compositions) that do not infringe on the copyrights of others. (SCMS is a feature that prohibits second-generation and later copying through a digital connection. It is built into MD recorders and other consumer digital-audio equipment as a copyright-protection feature.)
- Do not use this unit for purposes that could infringe on a copyright held by a third party. We assume no responsibility whatsoever with regard to any infringements of third-party copyrights arising through your use of this unit.

About the License Agreement

- The CD-2's CD-writing functionality, and its copying functionality are designed to allow you to reproduce material to which you have copyright, or material which the copyright owner has granted you permission to copy. Accordingly, reproduction of Music CD or other copyrighted material without permission of the copyright owner avoiding technical prohibiting features of second-generation and later copying like SCMS or others constitutes copyright infringement and may incur penalties even in case such reproduction is for your own personal use and enjoyment (private use). Consult a copyright specialist or special publications for more detailed information on obtaining such permission from copyright holders.

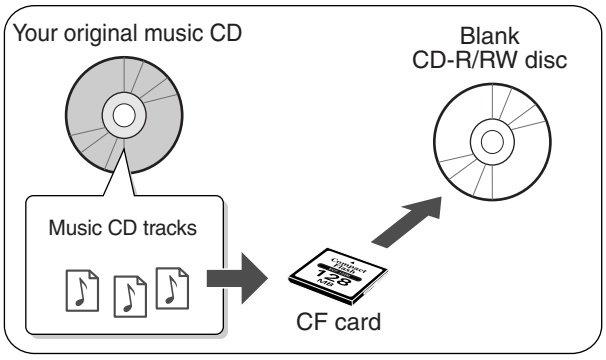
MEMO

- You can't copy a CD-R/RW disc that has not been finalized (Page 50).
- Music CDs that do not contain silence between tracks will be copied with two seconds of silence inserted between each track (see illustration below). In some cases, this may mean that the copy will not be identical to the original music CD.



■ Workflow to Copy CDs

When copying a music CD, the CD tracks are stored temporarily on the CF card. Then, the temporary tracks on the CF card are written to a blank CD-R/RW disc.



- The music CD tracks stored on the CF card will be erased after they have been written to the blank CD-R/RW disc.

NOTE

- The music CD's tracks will be stored up to the amount of free space available on the CF card. You may not be able to copy an entire CD if there's not enough free space remaining. If you use a CF card with 1 GB of free space, you will be able to copy an entire music CD.

Preparations **Insert a CF card to hold the music CD tracks.**

1 Press MENU until "CD COPY" appears in the display.

- You can also select this item by turning [DATA].

```
[UTILITY]
CD COPY
```

2 Press ENTER.

The message "Insert Master CD" appears.

```
CD COPY
Insert Master CD
```

3 Insert the music CD that you want to copy.

The music CD's tracks will be stored on the CF card. The display will indicate the progress.

Track currently being copied/ Total number of tracks to be copied

```
DUPLICATE  10/13
Reading CD.  20%
```

Progress (per track)

When the music CD's tracks have been stored on the CF card, the "Insert Blank CD" message will appear, and the music CD will be ejected.

```
CD COPY
Insert Blank CD
```

4 Remove the music CD, and insert a blank CD-R/RW disc.

When the disc has been detected, the "Are You Sure?" message appears.

```
CD COPY
Are You Sure?
```

- **If the display indicates "Short of Capa"**

  If the capacity of the CD-R/RW disc is less than the amount of data stored on the CF card, the message "Short Of Capa" will appear, and the CD-R/RW disc will be ejected. Please insert a CD-R/RW disc with more writable space.

5 To proceed copying, press ENTER.

(If you decide to cancel, press EXIT.)

The CD-2 will begin writing the data to the disc.

When the data has been written successfully, the CD-R/RW disc is ejected and the "Another Disc?" message appears.

```
CD COPY
Another Disc?
```

6 If you want to write the data to another CD-R/RW disc, press ENTER.

The "Insert Blank CD" message appears.

```
CD COPY
Insert Blank CD
```

Insert another blank CD-R/RW disc, and the "CD COPY. Are You Sure?" message appears.

Return to Step 5 and continue the procedure.

If you're finished writing, press EXIT.

You're returned to the previous readout.

Play back the newly written CD-R/RW disc (⇨ Page 40) to verify that it was written correctly.

■ If the screen indicates "Copy ##/xx Tr. Are You Sure?" in Step 3

The music CD's tracks will be written as far as the free space on the CF card allows. This means that if the CF card contains less free space than the amount of data from the music CD, you won't be able to record all of the tracks.

In this case, the message "Copy ##/xx Tr. Are You Sure?" will appear. This indicates that of the total number of tracks (xx), only track one through track ## will be copied.

Number of tracks to be copied/ Total number of tracks on CD

```
Copy  2/13 Track
Are You Sure?
```

Verify the number of tracks for recording, and press [ENTER] to continue the procedure. If you decide to cancel, press [EXIT].

Applying Effects to Your Vocal or Instrumental Performance

You can apply a variety of effects (acoustical processing) to your vocal or instrumental performance.

For example, you can apply echo to your vocal, or apply distortion to the sound of your electric guitar.

The CD-2 provides a variety of preset patches that are suitable for different instruments, and these are organized by category into three groups. Use the effect patch that's appropriate for your instrument and situation.

⇨ Page 88, "Effect Patch List"

- **DYNAMICS group:** For various instruments.
- **VOCAL group:** For vocal/various instruments.
- **GUITAR/BASS group:** For guitar/bass/guitar + vocal.

MEMO

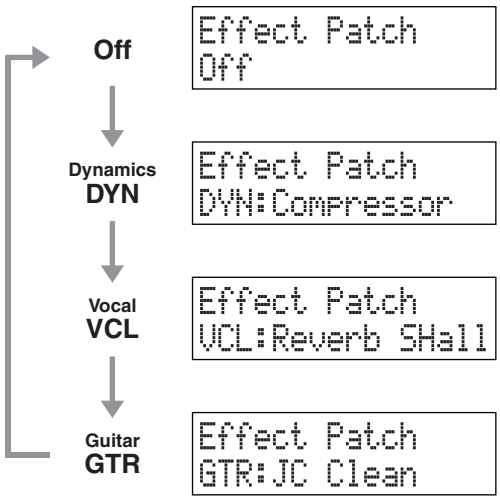
- You can freely select effects regardless of the group.
- Effects will not be applied to the instrument or audio source connected to the LINE IN jacks.
- You can't use an effect simultaneously with the Mastering Effects (Page 49).
- **Verifying which effects patch is currently selected**

  The patch that appears first when you press [EFFECT] is the currently selected patch. After noting the name of the patch, press [EXIT] to return to the original readout.
- The following effect patches allow you to simultaneously apply different effects to a guitar and a microphone. When using these patches, set the "Ext MIC1/2 Pan" parameter to "L/R" (⇨ Page 39). Then connect a guitar to the GUITAR jack and a mic to the MIC 2 jack.
  - JC-120+COMP
  - CRUNCH+COMP
  - BLUES+COMP
  - HVY CM + VO
  - S-PZO+DL EFX
  - SIM+50msDL
  - SIM+HVY CM
  - H-ENH+LNG DL

1 Repeatedly press EFFECT to select the desired patch group.

Each time you press the button, the selection will change as follows.

- If anything other than "Off" is selected, the effect will be on and the [EFFECT] button will light.



- If the Mastering Effects (⇨ Page 49) are on, the "Use EFFECT? MST will be Off" message appears.

  When you press [ENTER], the Mastering Effects are turned off, and the effect screen appears.

2 Turn DATA to select the patch you want.

Input sound into the CD-2 and you will hear it processed by the selected effect. Try out various patches while you listen to the result, and choose the patch that's most suitable for your situation.

3 Press EXIT.

You're returned to the previous readout.

- If you want to turn off the effect, choose "Off" in Step 1. The [EFFECT] button becomes unlit.

Backing Up Tracks from a CF Card

You can back up all tracks (recorded data) from a CF card to a CD-R/RW disc.

It's a good idea to back up important tracks to a CD-R/RW disc as a precaution against accidental damage or loss of the CF card.

NOTE

- Roland Corporation will take no responsibility for any loss of CF card tracks or recorded content that may result from failure of the backup operation, and will not be liable for any damages resulting from such loss.

  Additionally, Roland Corporation does not make any guarantee regarding the backed-up data, regardless of the performance or the state of the CD-R/RW drive.

MEMO

- The backup operation applies to all tracks on the CF card. You can't back up a single specific track.
- You can use the following CD-R/RW discs for backup.

	CD-R	CD-RW
An unused disc	OK	OK
A previously recorded disc		OK *

* *Once you've used a CD-RW disc for backup, no further tracks can be added to the backup even if there is remaining space on that disc. All data contained on the CD-RW disc will be erased before the backup is performed.*

- In order to play or edit data that you've backed up to a CD-R/RW disc, you'll need to restore the backup data to a CF card. ⇨ Page 72, "Recovering Backed-up Data"

■ If the screen indicates "Insert CD" in Step 4

If the CF card contains more data than can fit on a single CD-R/RW disc, the backup will be performed across multiple CD-R/RW discs.

In Step 4, the first CD-R/RW disc will be ejected. Then, the message "Insert CD" will be displayed. Insert another CD-R/RW disc. When the disc is detected, writing will begin automatically.

As directed by the messages that appear, exchange CD-R/RW discs to proceed with the backup.

- If the backup of a single track spans more than one CD-R/RW disc, you will be asked to insert the CD-R/RW discs in the correct order when you execute the Recover operation (⇨ Page 72).

  We recommend that you label each CD-R/RW disc with the correct number to indicate the backup order.

■ If the screen indicates "CD-RW Erase?" in Step 4

If you are using a previously recorded CD-RW disc, the "CD-RW Erase?" message appears.

If you press [ENTER], the existing data will be erased from the CD-RW disc, and then the backup will begin.

Preparations

❶ **Obtain the necessary number of CD-R/RW discs for the backup.**

If you're using a high-capacity CF card that holds 1 GB or 2 GB, the data may be too large to fit on a single CD-R/RW disc.

If so, the backup will span two or more discs. Obtain the necessary number of CD-R/RW discs before you continue.

❷ **Insert the CF card that you want to back up.**

1 Press MENU until "BACKUP CF→CD" appears in the display.

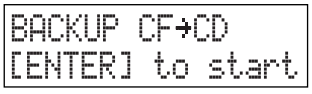
- You can also select this item by turning [DATA].

2 Press ENTER.

The "Insert Backup CD" message appears.

3 Insert the CD-R/RW disc.

When the disc has been detected, the "[ENTER] to start" message appears.



4 To begin the backup, press ENTER.

(If you decide to cancel, press EXIT.)

The backup begins.

When the backup is complete, the CD-R/RW disc will be ejected, and you're returned to the original readout.

Recovering Backed-up Data (Recover)

Here's how backed-up data from a CD-R/RW disc can be recovered to a CF card so that it can be played or edited.

MEMO

- Backed-up data can be recovered to a CF card in units of individual tracks.
- If a track with an identical title is recovered, a two-digit number will automatically be appended to the title.
- You can't recover data from a CD-R/RW disc if there is no free space on the CF card.

Preparations **Insert the CF card to which you will recover the backed-up data.**

1 Press MENU until "RECOVER CD→CF" appears in the display.

- You can also select this item by turning [DATA].

2 Press ENTER.

The message "Insert Backup CD" appears.

3 Insert the CD-R/RW disc that contains the data you want to recover.

When the CD-2 recognizes the CD-R/RW disc, the following screen appears.

4 Use ◀◀ or ▶▶ to select the track that you want to recover.

- The lower line of the screen indicates the track title (⇨ Page 59).
- If the backup spans two or more CD-R/RW discs, you won't know which disc contains the track you want to recover. You may need to swap discs in order to find and select the track you want to recover.

  Press [EJECT (⏏)] to eject the CD-R/RW disc, and return to Step 2. Insert another CD-R/RW disc in that backup set, and continue.

5 To recover the track you've selected, press ENTER.

(If you decide to cancel, press EXIT.)

Recovery begins. When recovery is completed, you're returned to the original readout.

■ If the screen indicates "Insert CD#" at Step 5

If the backup of one track spans two or more CD-R/RW discs, the "Insert CD #" message appears. ("#" indicates the disc number in the backup set.)

Insert disc number # of the backup set, and press [ENTER]. Recovery begins.

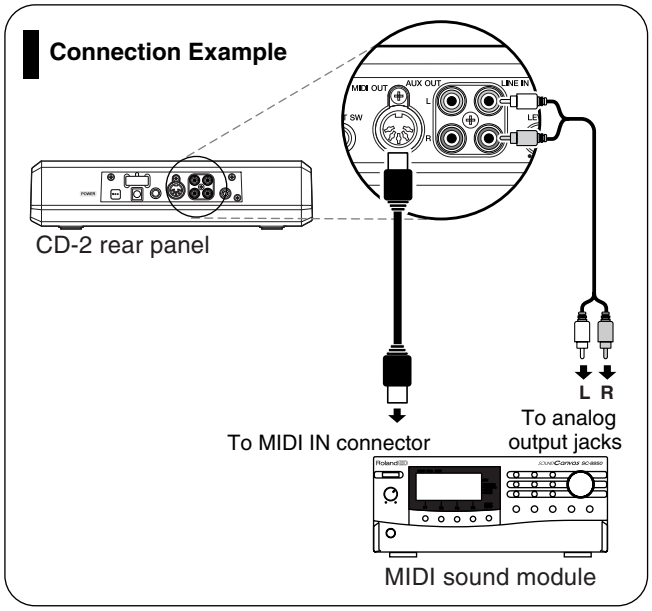
As directed by the messages, exchange CD-R/RW discs as you continue the recovery procedure.

When recovery has been completed, you're returned to the original readout.

Playing SMF (Standard MIDI File) Data

The CD-2 can play back SMF (Standard MIDI File) data from a CD-R/RW disc, and transmit the MIDI data to an external MIDI device (sound module or electronic keyboard) to play its sounds.

- SMF data written on a CF card cannot be played.



Cautions When Creating an SMF Data Disc

Please observe the following points when you create an SMF data disc for playback on the CD-2.

- We recommend that the file names and directory names be no more than eight characters long. Double-byte characters (e.g., Japanese) are not supported.

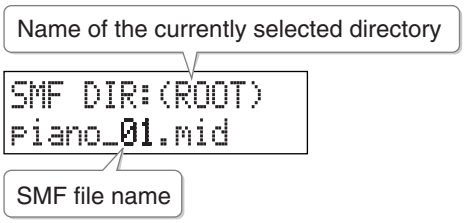
File name	Eight or fewer single-byte characters + filename extension
Directory name	Eight or fewer single-byte characters (no filename extension allowed)

- Add a filename extension of ".MID" or ".mid" to the SMF files.
- Write the data to the CD-R/RW disc in ISO9660 format.
- The CD-2 can play only Format 0 SMF files.

Format 0	Playable
Format 1	Not playable
Format 2	Not playable

1 Insert the CD-R/RW disc that contains the SMF data.

When the CD-2 detects the CD-R/RW disc, the SMF screen appears.



- Up to eight characters of the directory or SMF file name are displayed.

Directory name: OLD_DAYS (eight characters)

File name: Piano_01.mid (eight characters + extension)

2 Turn DATA to select the SMF you want to play.

- You can also press ◀◀ or ▶▶ to select the SMF.

To view the directory one level below	**Press** ENTER .
To view the directory one level above	**Press** EXIT .

3 On the CD side, press ▶/II .

The SMF will play.

Restoring the Factory Settings (Initialize)

When you execute the Initialize operation, all settings will revert to their factory settings. If the CD-2 does not operate as you expect even when you follow the steps in this manual, you may wish to execute the Initialize operation.

The table on the right shows the factory settings.

1 Press MENU until "INITIALIZE" appears in the display.

- You can also select this item by turning [DATA].

2 Press ENTER.

The message "Are You Sure?" appears.

3 To execute the Initialize operation, press ENTER.

(If you decide to cancel, press EXIT.)

The Initialize operation is executed.

When initialization has been completed, you're returned to the original readout.

Function	Parameter Name/ Button Name	Initial Value
Pitch	Pitch	0
Key	Key	0
Speed	Speed	0
Center Cancel	[CENTER CANCEL]	Off
Menu SYSTEM	LCD Contrast	5
	Time Display	Elapse
	Show Track Title	Off
	Foot Switch	Play
MIC	Int MIC Auto Lvl	On
	Int MIC Gain	25
	Int MIC Bal	C
	Ext MIC1/2 Pan	C/C
RECORDING	CF Rec Mode	Standard
	Auto Rec Start	Off
	Auto Marker	Off
	Auto Marker Time	5min
	Auto Marker Lvl	-60dB
METRONOME	Sound	Bell
	Tempo	120
	Beat	4
	Count-in (Beat)	Off
AUIDO	LINE IN	On
	CF Mix Level	0
	CD Mix Level	0
	AUX OUT Select	Mix
	AUX OUT Level	Fixed
Tuner	Pitch	440
	Tone	A4
Effect	Effect Patch	Off
Mastering Effect	Mastering Effect	Off
Mic select	[MIC SELECT]	Off (Unlit)
Mute	[SPEAKER MUTE]	Off (Unlit)
Repeat	REPEAT [1/ALL]	Off
	REPEAT [A-B]	Off

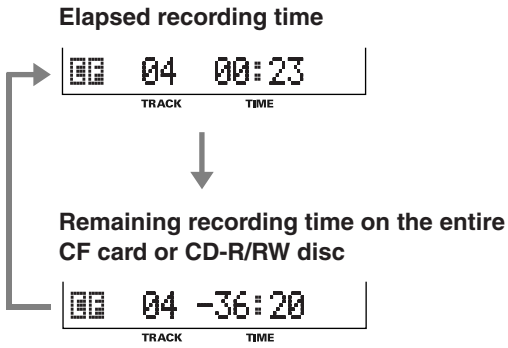
Other Functions and Settings

Displaying the Remaining Time

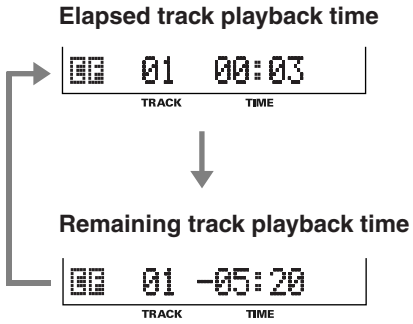
You can switch the display to show either elapsed time or remaining time during playback and recording.

When you press ENTER from the main screen, the time display will change as follows.

■ While recording or in recording-standby mode



■ While playing or stopped



You can also switch the time display as follows.

1 **Press MENU until "Time Display" appears in the display, and then press ENTER.**

- You can also select this item by turning [DATA].

The following screen appears.

2 **Turn DATA to select the time display that will appear in the screen.**

Elapse: During playback, the track's elapsed playback time is displayed.

During recording-standby/recording, the track's elapsed recording time is displayed.

Remain: During playback, the track's remaining playback time is displayed.

During recording-standby/recording, the remaining recording time on the CF card or CD-R/RW disc is displayed.

3 **Press EXIT twice.**

You're returned to the previous readout.

Specifying the Function of the Foot Switch

You can use a separately sold foot switch (such as the Roland DP-2 or BOSS FS-5U) to perform the following functions.

- Start/pause track playback
- Assign track numbers (only during recording)

You can choose one of the above functions for the foot switch to control.

MEMO

- Connect the foot switch to the FOOT SW jack located on the rear panel of the CD-2. Page 20, "Connecting Other Equipment"

1 Press MENU until "Foot Switch" appears in the display, and then press ENTER.

- You can also select this item by turning [DATA].

The following screen appears.

```
Foot Switch
          : Play
```

2 Turn DATA to choose the function of the foot switch.

Play: Performs the same function as ▶/II.
Alternately start or pause playback each time you press the foot switch.
When in recording-standby mode, alternately start or pause recording each time you press the foot switch.

Marker: Performs the same function as MARKER during recording.
A track number will be assigned at the time location where you press the foot switch during recording.
Page 55, "Using [MARKER] to assign track numbers"

3 Press EXIT twice.

You're returned to the previous readout.

Automatically Adjusting the Input Level of the Internal Mics (Auto Level Control)

Auto Level Control is a function that automatically adjusts the input level according to the loudness of the audio source when you record via the internal mics.

It is convenient to use Auto Level Control when you're recording material that consists mainly of speaking voices, such as a lecture.

- When the CD-2 is shipped from the factory, Auto Level Control is turned "On."

1 Press MENU until "Int MIC Auto Lvl" appears in the display, and then press ENTER.

- You can also select this item by turning [DATA].

The following screen appears.

```
Int MIC Auto Lvl
          :Off
```

2 Turn DATA to select "On."

3 Press EXIT twice.

You're returned to the previous readout.

MEMO

- If you want the recording to retain the original ambience of the room, turn Auto Level Control "Off" in Step 2. Then, adjust the internal mic input level manually.
Page 37, "Adjusting the Input Level: Internal Mic"

Adjusting the Output Level from the AUX OUT Jacks

Choosing the Audio Source that is Output from the AUX OUT Jacks

Here's how to choose the audio source that will be output from the CD-2's rear panel AUX OUT jacks.

1 Press MENU until "AUX OUT Select" appears in the display, and then press ENTER.

- You can also select this item by turning [DATA].

The following screen appears.

```
AUX OUT Select
          : MIC
```

2 Turn DATA to select the audio source that is output from the AUX OUT jacks.

Mix: The audio of all sources is mixed and output.

MIC: The audio from the MIC 1/MIC 2/GUITAR jacks or the CD-2's internal mics is output.

LINE: The audio from the LINE IN jacks is output.

CD: The audio from the CD is output.

CF: The audio from the CF card is output.

3 Press EXIT twice.

You're returned to the previous readout.

Adjusting the Output Level of the AUX OUT Jacks

Here's how to adjust the output level of the AUX OUT jacks.

1 Press MENU until "AUX OUT Level" appears in the display, and then press ENTER.

- You can also select this item by turning [DATA].

The following screen appears.

```
AUX OUT Level
       :  Fixed
```

2 Turn DATA to select "Variable."

Fixed: The output level is fixed.
The audio signal selected for "AUX OUT Select" (⇨ Page 77) is output at nominal level.

Variable: The [OUTPUT LEVEL] knob will adjust the output level.

3 Press EXIT twice.

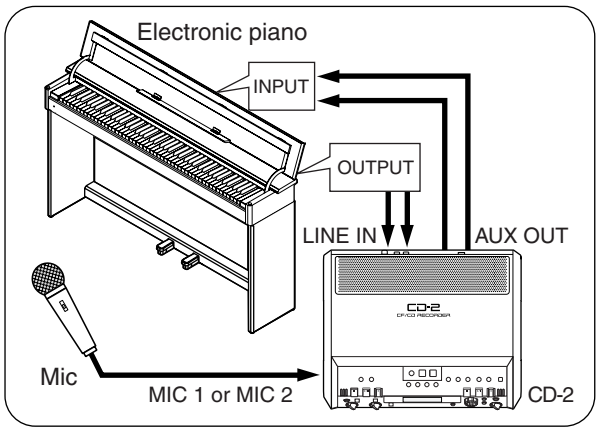
You're returned to the previous readout.

Use the [OUTPUT LEVEL] knob to adjust the output level of the AUX OUT jacks.

HINT

- If you want to record your performance on an electronic piano together with your voice, make connections as shown below so that the sound from the mic will also be output from the speakers of the electronic piano.

  At this time, set AUX OUT to "MIC" to prevent a feedback loop from occurring between the CD-2 and the electronic piano.



Switching the Line Input On/Off

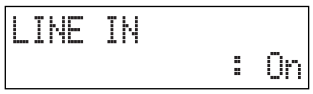
When you're using mics as well as instruments connected to the LINE IN jacks, you may want to temporarily use only the mics.

If so, you can turn off the line input. Sound will no longer be input from the LINE IN jacks, and only the sound from the mics will be heard.

1 Press MENU until "LINE IN" appears in the display, and then press ENTER.

- You can also select this item by turning [DATA].

The following screen appears.



2 Turn DATA to select "Off."

- Sound will no longer be input via the LINE IN jacks.

3 Press EXIT twice.

You're returned to the previous readout.

MEMO

- The "Off" setting is temporary, and will be cleared when you turn off the power. It will automatically be turned "On" the next time you turn on the power.

Viewing the Track Titles on a CF Card

You can assign titles to the tracks on a CF card (Page 59). If you want to view the track titles, use the following procedure.

MEMO

- For wave files (WAV format) written by a computer to a CF card (Page 45), the filename is the track title.

1 Press MENU until "Show Track Title" appears in the display, and then press ENTER.

- You can also select this item by turning [DATA].

The following screen appears.

2 Turn DATA to select "On."

3 Press EXIT twice.

You're returned to the previous readout.

Subsequently, when you switch tracks on the CF card, the track title will be shown briefly, and then the time display will reappear.

If the title is so long that it cannot be displayed at one time, it will scroll to display additional characters (up to the first 27).

Adjusting the Playback Level of a Music CD/CF Card

Here's how to adjust the playback level of a music CD or CF card.

1

- To adjust the playback level of a music CD

  Press MENU until "CD Mix Level" appears in the display, and then press ENTER.

  - You can also select this item by turning [DATA].

  The following screen appears.

  ```
  CD Mix Level
              :  0
  ```

- To adjust the playback level of a CF card

  Press MENU until "CF Mix Level" appears in the display, and then press ENTER.

  - You can also select this item by turning [DATA].

  The following screen appears.

  ```
  CF Mix Level
              :  0
  ```

2

Turn DATA to adjust the playback level.

- You can adjust the level in a range of -50–+25.
- A setting of "0" is the original playback level.

MEMO

- For tips on adjusting the playback level, refer to Step 2 of "Temporarily Adjusting the Playback Level of a Music CD or CF Card" on Page 38.

3

Press EXIT twice.

You're returned to the previous readout.

Subsequently, the music CD or CF card will play back at the level you specified.

MEMO

- You can also change the playback level temporarily.
  ⇨ Page 38, "Temporarily Adjusting the Playback Level of a Music CD or CF Card"

Appendices

Refer to this information when needed.

Reference

- Troubleshooting 82
- Messages 87
- Effect Patch List 88
- Menu List 90
- Specifications 91
- Index 92
- Information 94

Troubleshooting

If you suspect a malfunction, please check the following points. If this does not resolve the problem, contact a nearby Roland Service Center.

■ Power Supply

Problem	Cause and Action	See Page
The power does not turn on when you press the [POWER] switch.	● **Could the AC adaptor plug have been disconnected from the CD-2's AC adaptor jack? Could the power cable have been disconnected from the AC outlet or the AC adaptor's connector?** → Firmly reconnect the AC adaptor and power cable.	**20**

■ Screen

Problem	Cause and Action	See Page
The screen is difficult to read	● **Depending on the location or environment in which the CD-2 is placed, the screen may be difficult to read.** → Readjust the display contrast.	**25**
Unreadable characters appear on the screen	● **Could the language of the display be set to "Japanese"?** → Change the Language setting to "English".	**—**

■ Problems with the Sound

Problem	Cause and Action	See Page
No sound	● **Could the connections be incorrect?** → Make the correct connections.	**20**
	● **Could the power on the connected equipment (mic, digital piano, etc.) be switched off?** → Turn on the power.	**—**
	● **Are condenser mics connected?** → If you're using condenser mics, turn the CD-2's phantom power switch "ON."	**22**
	● **Could the volume of the connected device be turned down?** → Raise the volume of the connected device.	**—**
	● **Could headphones be plugged in?** → Unplug the headphones.	**—**
	● **Is the volume set to the minimum (MIN)?** → Use the [OUTPUT LEVEL] knob to raise the volume.	**25**
	● **Could speaker muting be on ([SPEAKER MUTE] button lit)?** → Press the [SPEAKER MUTE] button to defeat speaker muting (unlit).	**25**
The input source (audio source) is not output	● **Could the input level be set to the minimum?** → Use the appropriate knob for the MIC 1/MIC 2/GUITAR/LINE IN jacks to raise the input level.	**38**
	● **Could the [MIC SELECT] button be lit green?** → If the internal mics are the input source ([MIC SELECT] button lit green), the sound of the internal mics is not output from the speakers. Use headphones to monitor the sound of the internal mics.	**37**

■ Problems with the Sound (continued)

Problem	Cause and Action	See Page
The input source (audio source) is not output	● **Could devices be connected to both the MIC 1 jack and GUITAR jack?** → If you connect devices to both the MIC 1 jack and the GUITAR jack, the sound from the MIC 1 jack will not be input. If you want to input sound from the MIC 1 jack, remove the plug from the GUITAR jack.	**21**
	● **Could the setting of the [MIC SELECT] button be incorrect?** → Use the setting that's appropriate for the input source.	**37**
	● **Could the line input be turned off?** → Turn the LINE IN "On."	**78**
Insufficient volume from a device connected to the MIC 1/MIC 2/GUITAR/LINE IN jacks	● **Could you be using a connection cable that contains an internal resistor?** → Use a connection cable that does not contain an internal resistor (such as one from the Roland PCS-series).	**—**
The sound recorded via the internal mics is not loud enough	● **Did you adjust the input level of the internal mics?** → Use Int MIC Gain to raise the input level of the internal mics.	**37**
The recorded sound is noisy or distorted	● **Is the input level adjusted appropriately?** → Adjust the input level so that the level meter briefly reaches "-3 dB" when loud sounds are input.	**37, 38**
	● **Could you have raised the input level for sources that are not connected?** → Even if no equipment is connected, we recommend that you set the input level to the minimum (MIN) for all inputs that you are not recording.	**—**
	● **Could the [MIC SELECT] button be lit orange?** → Even if you are intending to record via external mics, a noisy recording may indicate that you are actually recording from the internal mics. Set the [MIC SELECT] button to the correct position for the audio source you intend to record.	**37**
	● **When recording the sound from an instrument connected to the LINE IN jacks, could you be unintentionally recording the sound from another CD-2 source as well?** → When recording only the sound from the LINE IN jacks, make sure that [MIC SELECT] is off (unlit).	**37**
	● **Could you be applying a mastering effect while creating a music CD?** → Some mastering effect patches may cause noise or distortion when used with certain types of material. Try changing to a different mastering effect patch.	**49**
	● **Is the output level set correctly?** → If you raise the output level too high, noise or distortion may occur in the sound from the internal speakers. Use the [OUTPUT LEVEL] knob to adjust the volume.	**25**
An unwanted effect is applied to the sound	● **Could you have selected an effect?** → Turn the effect "Off."	**70**
	● **Could a mastering effect be selected?** → Turn the mastering effect "Off."	**49**
Sound is briefly heard from the internal speakers even though they are muted	● **Were you connecting or disconnecting headphones?** → If the speakers are muted (the [SPEAKER MUTE] button is lit), noise may be heard from the internal speakers when you connect or disconnect the headphones; this is not a malfunction.	**—**

■ CD-Related Problems

Problem	Cause and Action	See Page
Normal playback does not work	● **Could the CD be upside down?** → Insert the CD with the label facing upward.	**26**
	● **Could you have inserted a CD on which nothing has been recorded?** → Insert a different disc.	**—**
	● **Could you be using Repeat playback?** → Press [1/ALL] enough times to get the Repeat icon (R1 / RA) to disappear.	**43**
	● **Could you be using A-B Repeat playback?** → Press [A-B] to get the A-B Repeat icon (AB) to disappear. → Alternatively, press the CD [Stop (■)] to stop playback. A-B Repeat playback will be defeated.	**43** **43**
	● **Could the playback speed have been changed?** → Set the Speed setting to "0" so that the Speed icon ( ) disappears.	**40**
	● **Could the Pitch setting have been changed?** → Set the Pitch setting to "0" so that the Pitch icon ( ) disappears.	**41**
	● **Could the Key setting have been changed?** → Set the Key setting to "0" so that the Key icon ( ) disappears.	**42**
	● **Could Center Cancel be turned "On"?** → Press [CENTER CANCEL] so that the Center Cancel icon ( ) disappears.	**42**
	● **Could the CD be damaged?** → Try playing a different CD.	**—**
	● **Could the CD [Play (►/II)] button be blinking?** → If the button is blinking, the CD is paused. Press [Play (►/II)] to defeat pause.	**40**
Insufficient playback volume	● **Could the CD playback level be turned down?** → Use CD Mix Level to raise the playback level.	**38, 79**
Can't record	● **Could the CD be upside down?** → Insert the CD with the label facing upward.	**26**
	● **Could you be attempting to record on a CD-R/RW disc that has already been finalized?** → Use a blank or appendable CD-R/RW disc. → If you want to record on a CD-R/RW disc that has already been finalized, you'll need to remove finalization so that the disc can be recorded to again.	**—** **65**
	● **Is it possible that the maximum recordable time or number of tracks (CD-R: maximum of 99 tracks, CD-RW: maximum of 98 tracks) has already been exceeded?** → If there are unwanted tracks on the disc, delete them before you continue recording. (This is only possible on a CD-RW disc.)	**64**
	● **Could you be attempting to record or erase a CD-RW disc more times than it is capable of?** → A CD-RW disc can be recorded and erased approximately one thousand times.	**—**
	● **Could you be attempting to record an extremely short performance?** → You can't record for less than four seconds.	**29**

■ CD-Related Problems (continued)

Problem	Cause and Action	See Page
Can't record (continued)	● **Are you using a generic CD-R/RW disc?** → Use a CD-R/RW disc from a recommended manufacturer.	18
After recording, the CD won't play back on a conventional CD player	● **Did you finalize the disc after recording?** → Execute the Finalize operation.	50
	● **Is your CD player able to play back CD-R or CD-RW discs?** → If your CD player does not support CD-R or CD-RW discs, they may not play back correctly.	—
SMF data written to a CD-R/RW disc is not recognized	● **Could the filename contain double-byte (e.g., Japanese) characters?** → Filenames containing double-byte (e.g., Japanese) characters will not be recognized.	—
The disc tray will not open	● **Is the CD-2 powered up?** → Turn on the power of the CD-2. If a power failure has occurred, you can use the emergency eject hole to open the disc tray manually.	24 26
CD-R/RW drive produces significant mechanical noise when operating	● **Could you be using a high-speed compatible CD-RW disc?** → If you're using a high-speed compatible CD-RW disc, performing the following operations will cause the disc to rotate at high speed, producing a greater level of mechanical noise. This is not a malfunction. • When you stop recording • When you assign a song number • When you delete a track • When you finalize If you find the mechanical operating noise of the CD-R/RW drive objectionable, please use an 8x compatible CD-R disc or a 1-4x compatible CD-RW disc.	—

■ CF Card-Related Problems

Problem	Cause and Action	See Page
The CF card is not detected	● **Could the CF card be of a capacity that is not supported?** → Check the capacity of the CF card, and use a card of a capacity supported by the CD-2.	18
	● **Is the CF card inserted all the way into the slot?** → Make sure that the card is oriented correctly, and that it is pushed all the way into the slot.	27
	● **Could you have turned off the power while recording, or could the CF card have been subjected to strong impact?** → It is possible that the data has been damaged. Reformat the CF card.	63
The CF card won't play back	● **Could you have inserted a CF card on which nothing has been recorded?** → Insert a different CF card.	—
	● **Could you be using Repeat playback?** → Press [1/ALL] enough times to turn off the Repeat icon (R1 / RA).	44
	● **Could you be using A-B Repeat playback?** → Press [A-B] to get the A-B Repeat icon (AB) to disappear. → Alternatively, press the CF card [Stop (■)] to stop playback. A-B Repeat playback will be defeated.	45 45
	● **Is the CF card [Play (►/II)] button blinking?** → If the button is blinking, the CF card is paused. Press [Play (►/II)] to defeat pause.	44

■ CF Card-Related Problems (continued)

Problem	Cause and Action	See Page
Insufficient playback volume	● **Could the CF card playback level be set to the minimum?** ➔ Adjust CF Mix Level to raise the playback level.	**38, 79**
Can't record	● **Is the CF card inserted all the way into the slot?** ➔ Make sure that the card is oriented correctly, and that it is pushed all the way into the slot.	**27**
	● **Could you be attempting to record an extremely short performance?** ➔ You can't record for less than four seconds.	**29**
	● **Is it possible that the maximum recordable time or number of tracks (maximum of 99 tracks) for the card has been exceeded?** ➔ If there are unwanted tracks on the card, delete them before you continue recording.	**58**
The recording time is too short	● **Have you selected the correct recording mode?** ➔ The available recording time will depend on the recording mode. Choose the recording mode that's appropriate for the material you're recording.	**36**
It takes a long time to erase a track	● **Could you be erasing a long track?** ➔ The amount of time needed to erase a track will depend on the length of the track and on the recording mode (⇨ Page 36). The following table shows the time required to erase a track that is three hours long.	**—**
Wave files written using your computer are not recognized	● **Could the wave files be too short?** ➔ Wave files shorter than four seconds will not be recognized.	**—**
	● **Could the filename contain double-byte characters (e.g., Japanese) or "~" (tilde)?** ➔ Filenames containing double-byte characters (e.g., Japanese) or "~" (tilde) will not be recognized.	**—**

Recording mode	Standard	Long	WAV
Time required for erasure	Approx. 1 minute 30 seconds	Approx. 45 seconds	Approx. 3 minutes

■ Other problems

Problem	Cause and Action	See Page
You hear noise when playing a file from a CF card track on your computer	● **Could you be playing a file with a filename extension of ".DAT"?** ➔ ".DAT" files are in a special format used only by the CD-2. Do not attempt to play them on your computer.	**—**

Messages

If a message is displayed, refer to the following list and take the appropriate action.

Message	Content	Action
Blank Disc	The disc is blank (empty).	Use a CD-R/RW disc that is not blank.
CD Disc Busy	The disc could not be read/written in time.	If this appears during playback, use an unscratched disc. If this appears during recording, use a recommended brand of disc.
CD Disc Full	The disc is full. No more tracks can be recorded.	Record on another disc. Delete unwanted tracks to increase the free space (CD-RW disc). ⇨ Page 64
CD Track Full	You have reached the maximum number of tracks (CD-R: 99, CD-RW: 98) that can be recorded on a disc. No more tracks can be recorded.	Record on another disc. Delete unwanted tracks to increase the free space (CD-RW disc). ⇨ Page 64
CD Read Failed	Failed to read a disc.	Use a disc that is not scratched.
CD Write Failed	Failed to write a disc.	Use a recommended brand of disc.
CF Can't Format	Failed to format the card.	Use a different card.
CF Card Full	The card is full. No more tracks can be recorded.	Delete unwanted tracks to increase the free space. ⇨ Page 58
CF No Enough Mem	The card does not have enough free space for the operation.	Delete unwanted tracks to increase the free space. ⇨ Page 58
CF Track Full	You have reached the maximum number of tracks (99) that can be recorded on a CF card. No more tracks can be recorded.	Delete unwanted tracks to increase the free space. ⇨ Page 58
CF Was Removed	The CF card was removed while reading or writing.	Turn the power off, and then on again; if normal operation does not resume, format the card. ⇨ Page 63
Count-in REC	Recording will begin after a count-in.	—
Divide Multiple	The track will be divided for writing on multiple discs.	—
Finalized Disc	The disc has been finalized.	Use an unfinalized CD-R/RW disc.
Improper Disc	The disc is an inappropriate type for the operation you are attempting to perform.	Use a disc that is appropriate for the operation.
Not A CD-RW	The disc is not a CD-RW disc.	Use a CD-RW disc.
No Title	No title has been entered.	Assign a title of one character or more.
REC Too Short	You can't stop recording because the elapsed recording time has not reached four seconds. The track number can't be assigned because the location selected is less than four seconds after the previous track number.	Each recording must be longer than four seconds. Assign track numbers at intervals of four seconds or greater.
Same Name Exists	A track with the same name exists on the CF card. Cannot assign the name to the track.	Assign a unique name to the track.
SMF Too Big	The SMF file exceeds the size (1 MB) that the CD-2 can play. Playback is not possible.	Use an SMF file that the CD-2 is able to play.
Short Of Capa	You can't assign a CF track that exceeds the available CD-R/RW disc space.	Either use another disc, or assign a smaller CF track.
Tr is Too Short	You can't trim or divide because a track can't be shorter than four seconds.	—
Unknown Disc	The disc cannot be used with the CD-2.	Confirm that the disc can be used. ⇨ Page 17, 71, 73
Unsupported CF	The CD-2 is unable to use this CF card.	Use a different card.
Unsupported File	The CD-2 is unable to play this SMF file.	The CD-2 can play only Format 0 SMF files.
Waiting Signal..	Waiting for audio input to trigger recording.	To begin recording, input an audio signal.

Effect Patch List

■ DYN (Dynamics Group)

Patch Name	Function
Compressor	Basic control of audio dynamic range.
Limiter	Basic control of extreme peaks in audio dynamic range.
De-Esser	Removes sibilance and harshness from the voice.
Noisy Room	Use to improve sound intelligibility on recordings made in noisy environments.
Loud Voice	Controls extreme peaks in loud speaking or singing.
Soft Voice	Controls overall dynamic range of subtle singing or speaking.
Piano	Enhances and controls the dynamic range of an acoustic piano for better clarity.
Drum Kit	Smoothes out the dynamic range of a drum kit recording.
Rock Band	Use when recording a rock or pop band with heavy amplification.
Jazz Band	Use for recording a live performance of a jazz band.
Orchestra	Use for recording a live concert of a band or orchestra.
Squish!	Use on audio with constant extremes in loudness and softness.
CMP+FAT EQ	Maximized sound level and tonal character suitable for dance music.
LO&SLOW FLNG	Slow modulation effect.
ST CHORUS	Deep and spacious sound produced by a chorus effect.
PS:DETUNE	Pitch-shifted sound added to create depth.
ST DOUBLER	Doubling applied to produce a spacious sound.
CHORUS+DELAY	Chorus and delay combined to enhance the spatial spread.
1920's RADIO	Simulates the sound of an antique radio that's not tuned correctly.
1960's RADIO	Simulates the sound of a noisy old radio.
VINTAGE 45's	Simulates the sound of a 45 RPM single played on an antique phonograph.
CLASSIC LP	Simulates the sound of an LP played on a turntable.

■ VCL (Vocal Group)

Patch Name	Function
Reverb SHall	Simulate the reverberation in a small hall.
Reverb LHall	Simulate the reverberation in a large hall.
Reverb SRoom	Simulate the reverberation in a small room.
Reverb LRoom	Simulate the reverberation in a large room.
Reverb Plate	Simulate the reverberation of a metallic board.
LONG ECHO	Long echo.
MID ECHO	Medium echo.
SHORT ECHO	Short echo.
KARAOKE VOX	Simulate KARAOKE VOX.
Vocal FX	Basic setup for recording or mixing vocals.
Male Vocal	Controls harsh mids and improves the tone quality of a male vocal.
Rock Male	Adds spaciousness and energy to male vocal.
Jazz Male	Adds an overall mellow sound to the voice.
Female Vocal	Smoothes out harsh mids and adds sparkle to upper frequencies.
Rock Female	Adds spaciousness and energy to female vocal.
Jazz Female	Adds smoothness and warmth to female jazz performance.
Big Chorus	An effect similar to increasing the number of vocalists.
Narration	Heavy compression to even out the voice for video and radio dialogue.
Low Cut	Removes low end rumble and "plosives" from vocals miked too close.
Sparkle	Adds crispness and sizzle to vocals for more presence.
Vox Double	Adds a double tracking effect to the vocal.

Patch Name	Function
Unison VOX	Adds a octave down voice to the vocal.
M&F Duet	Transforms a voice into a male part and female part.
VOX Detune	Adds a detune voice to the vocal.
CHIPS & MUNK	Pitch shifting effect that raises the octave of the voice.
Deep Voice	Pitch shifting effect that lowers the octave of the voice.

■ GTR (Guitar/Bass Group)

Patch Name	Function
JC Clean	Roland JC-120. Use chorus on the mixdown.
Rock Lead	Straight-ahead distortion sound with delay.
TW Clean	American-made vacuum tube combo amp from the black-face period.
TEXAS	Driven sound of an American-made vacuum tube amp from the 50's.
Driven Lead	Replica of a British combo amp modified for high gain.
Metal Lead	A lead sound suitable for metal.
SWEET LEAD	Large vacuum tube amp stack popular in British hard rock of the 70's.
Delayed Lead	Straight-ahead distortion sound with delay.
80's Hard	Powerful high-gain metal sound.
90's Metal	Large vacuum tube amp popular for American heavy metal.
7TH STRINGS?	The sound of a large vacuum tube amp for heavy metal using a seven-string guitar.
JAZZ GT	The sound of a vacuum tube combo amp.
PH CRUNCH	Natural-sounding crunch distortion.
JET FLANGER	Distortion with a metallic-sounding flanging effect.
AC SimCuttin	A tone with a strong attack that won't get buried by other instruments in the band.
ACOUSTY	Use this with a humbucking pickup guitar to obtain the tone of an acoustic guitar.
AC Sim Lead	Use this with a single-coil pickup guitar to obtain the tone of an acoustic guitar.
Brite Acustc	Simulates the sound of the pickups installed in an electric-acoustic. A compressor is lightly applied to the attack.
Tight Bass	Transforms an electric guitar into a crisp-sounding bass guitar.
Loose Bass	Transforms an electric guitar into the sound of a bass guitar strung with heavy strings.
A.GTR Fat	Simulates a fat-sounding acoustic guitar.
A.GTR LEAD	Simulates an acoustic guitar suitable for lead playing.
MIC'D ACUSTC	Produces the sound of an acoustic guitar recorded through a mic.
WIDE ACUSTC	Simulates an acoustic guitar with a wide left/right spatial spread.
SLAP'n POP	Hard-compressed sound suitable for slap playing.
FRETLESS B.	Simulates a fretless bass.
PHASE BASS	Produces the sound of a bass with a phaser effect applied.
FLANG BASS	Produces the sound of a bass with a flanger effect applied.
STD BASS	Produces the vintage sound of an early transistor amp.
DRIVIN' BASS	A large double-stack vacuum tube amp with a distinctive ultra-low sound and edge.
JC-120+COMP	An algorithm for simultaneously recording a guitar sent through the JC-120 together with a vocal.
CRUNCH+COMP	Suitable for simultaneously recording a crunch sound with natural distortion together with a vocal.
BLUES+COMP	Suitable for simultaneously recording a midrange lead sound suitable for blues together with a vocal.
HVY CM + VO	Suitable for simultaneously recording the Liverpool sound of the 60's together with a vocal.
S-PZO+DL EFX	Suitable for simultaneously recording an electric-acoustic pickup simulation together with a vocal.
SIM+50msDL	Suitable for simultaneously recording the sound of a large-bodied acoustic guitar together with a vocal.
SIM+HVY CM	Suitable for simultaneously recording an acoustic guitar with a strong attack together with a vocal.
H-ENH+LNG DL	Suitable for simultaneously recording an acoustic guitar sound together with a vocal with a long delay applied.

Menu List

The following table shows the various menus that are displayed when [MENU] is pressed.

Upper Line	Lower Line	See Page
[SYSTEM]	LCD Contrast	**25**
	Time Display	**75**
	Show Track Title	**78**
	Foot Switch	**76**
	Language	**—**
	INITIALIZE	**74**
[MIC]	Int MIC Auto Lvl	**76**
	Int MIC Gain	**37**
	Int MIC Bal	**39**
	Ext MIC1/2 Pan	**39**
[RECORDING]	CF Rec Mode	**36**
	Auto Rec Start	**54**
	Auto Marker	**56, 57**
	Auto Marker Time	**56**
	Auto Marker Lvl	**57**
[METRONOME]	Sound	**52**
	Tempo	**52**
	Beat	**52**
	Count-in (Beat)	**53**
[AUDIO]	LINE IN	**78**
	CF Mix Level	**79**
	CD Mix Level	**79**
	AUX OUT Select	**77**
	AUX OUT Level	**77**
[UTILITY]	BACKUP CF→CD	**71**
	RECOVER CD→CF	**72**
	CD COPY	**69**

Specifications

Recorder	
Tracks	2 (Stereo)
Sample Rate	44.1 kHz
Signal Processing	AD/DA conversion: 24 bits
Recording Mode	Standard, Long, WAV
Recording Media	CompactFlash (16 MB–2 GB), CD-R, CD-RW
Recording Time (unit: min)	<table><tr><th></th><th>Standard</th><th>Long</th><th>WAV</th></tr><tr><td>16MB</td><td>3</td><td>6</td><td>1.5</td></tr><tr><td>32MB</td><td>6</td><td>2</td><td>3</td></tr><tr><td>64MB</td><td>12</td><td>24</td><td>6</td></tr><tr><td>128MB</td><td>24</td><td>49</td><td>12</td></tr><tr><td>256MB</td><td>49</td><td>98</td><td>24</td></tr><tr><td>512MB</td><td>98</td><td>196</td><td>49</td></tr><tr><td>1GB</td><td>196</td><td>392</td><td>98</td></tr><tr><td>2GB</td><td>392</td><td>784</td><td>196</td></tr></table> * *The above-listed recording times are approximate. Times may varys slightly depending on the number of songs that were created.* * *Maximum recording time of 1 song is 3 hours.*
Recording Songs	Up to 99 songs on a single CompactFlash or CD-R/Up to 98 songs on a single CD-RW
Input/Output	
Audio Input	Internal Stereo Microphone
	MIC Input 1, 2 Jack: XLR-type with phantom power, 1/4 inch TRS phone-type Guitar (Hi-Z) Jack: 1/4 inch phone-type, LINE Input Jacks (L, R): RCA phono-type
Audio Output	Internal Stereo Speaker, PHONES Jack: Stereo 1/4 inch phone-type, AUX Out Jacks (L, R): RCA phono-type
Frequency Response	20 Hz–20 kHz (+0 dB/-2 dB)
Nominal Input Level (variable)	MIC Input 1, 2 Jack: -63– -31 dBu (maximum -19 dBu: balanced, maximum -13 dBu: unbalanced) Guitar Jack (Hi-Z): -40– -9 dBu (maximum +3 dBu), LINE Input Jacks (L, R): -2– +12 dBu (maximum +24 dBu)
Nominal Output Level	AUX Output Jacks (L, R): -8 dBu (maximum +4 dBu)
Input Impedance	MIC Input 1, 2 Jack: 4 k ohms (balanced), Guitar Jack (Hi-Z): 1 M ohms, Line Input Jacks (L, R): 9 k ohms
Output Impedance	AUX Output Jacks (L, R): 1 k ohms, Phones Jack: 10 ohms
Recommended Load Impedance	AUX Output Jacks (L, R): 10 k ohms or greater, Phones Jack: 32 ohms
Other Input/Output Connectors	MIDI Out Connector: 5-pin DIN type, Foot Switch Jack: 1/4 inch phone type
Effects	
	Dynamics group: 22 patches, Vocal group: 26 patches, Guitar/Bass group: 38 patches, Mastering Tool: 25 patches
Others	
Display	16 characters, 2 lines (backlit LCD)
Dimensions	302 (W) x 242 (D) x 76 (H) mm 11-15/16 (W) x 9-9/16 (D) x 3 (H) inches
Weight	3.1 kg 6 lbs 14 oz
Power Supply	AC Adaptor (PSB-3U)
Current Draw	3.0 A
Accessories	Owner's Manual, AC Adaptor (PSB-3U), Power Cord, CompactFlash (128 M bytes), CD-R (Blank media), Card Protector
Options	Foot Switch: FS-5U (BOSS), Pedal Switch: DP-2

* *(0 dBu = 0.775 V rms)*

* *In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.*

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As of January 15, 2005 (ROLAND)

For EU Countries

CE

This product complies with the requirements of European Directive 89/336/EEC.

For the USA

FEDERAL COMMUNICATIONS COMMISSION
RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

Unauthorized changes or modification to this system can void the users authority to operate this equipment.
This equipment requires shielded interface cables in order to meet FCC class B Limit.

For Canada

NOTICE

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

AVIS

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

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